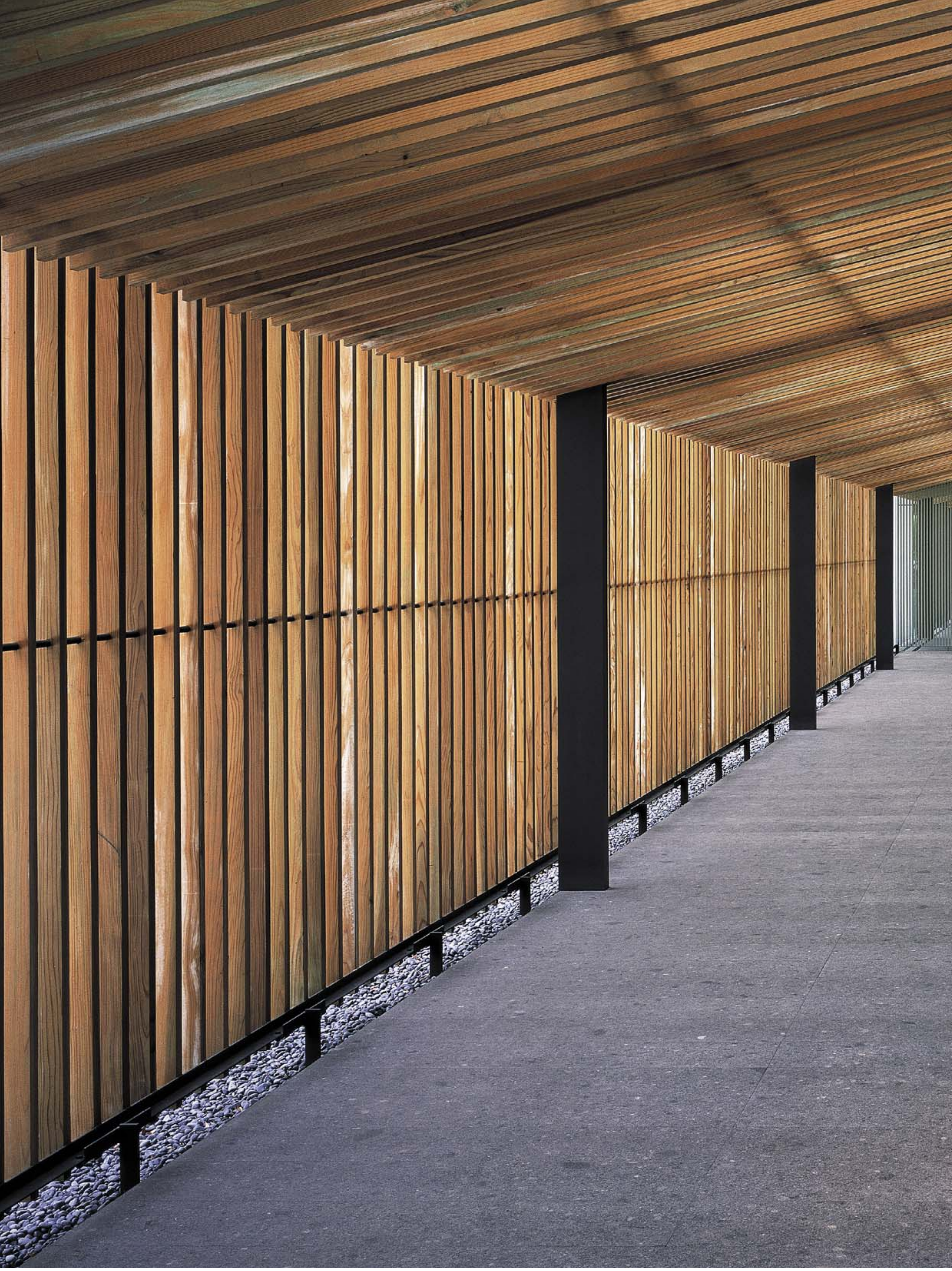
KENGO KUMA

SELECTED WORKS

BOTOND BOGNAR

KENGO
KUMA



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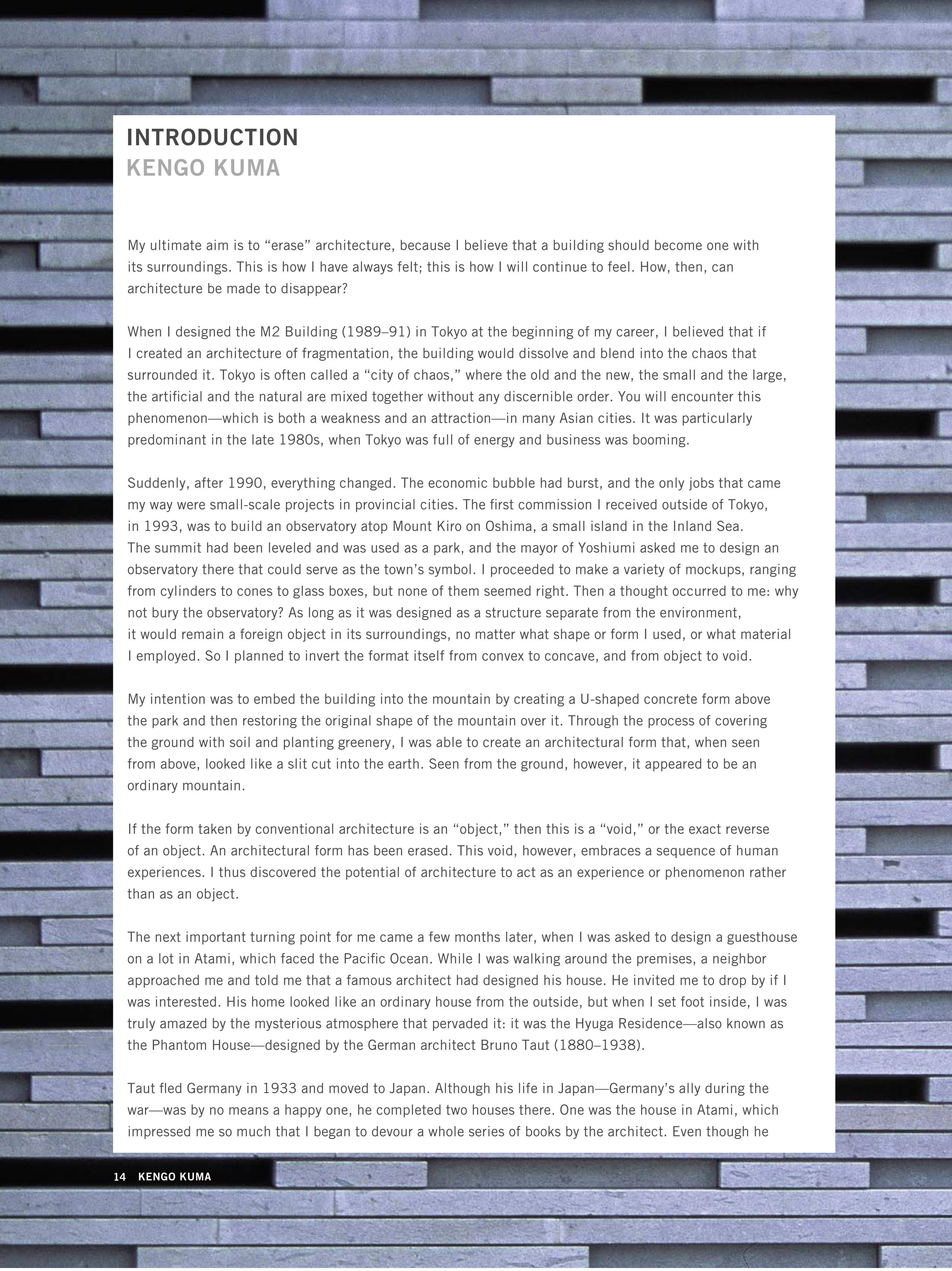


INTRODUCTION
KENGO KUMA

My ultimate aim is to “erase” architecture, because I believe that a building should become one with its surroundings. This is how I have always felt; this is how I will continue to feel. How, then, can architecture be made to disappear?

When I designed the M2 Building (1989–91) in Tokyo at the beginning of my career, I believed that if I created an architecture of fragmentation, the building would dissolve and blend into the chaos that surrounded it. Tokyo is often called a “city of chaos,” where the old and the new, the small and the large, the artificial and the natural are mixed together without any discernible order. You will encounter this phenomenon—which is both a weakness and an attraction—in many Asian cities. It was particularly predominant in the late 1980s, when Tokyo was full of energy and business was booming.

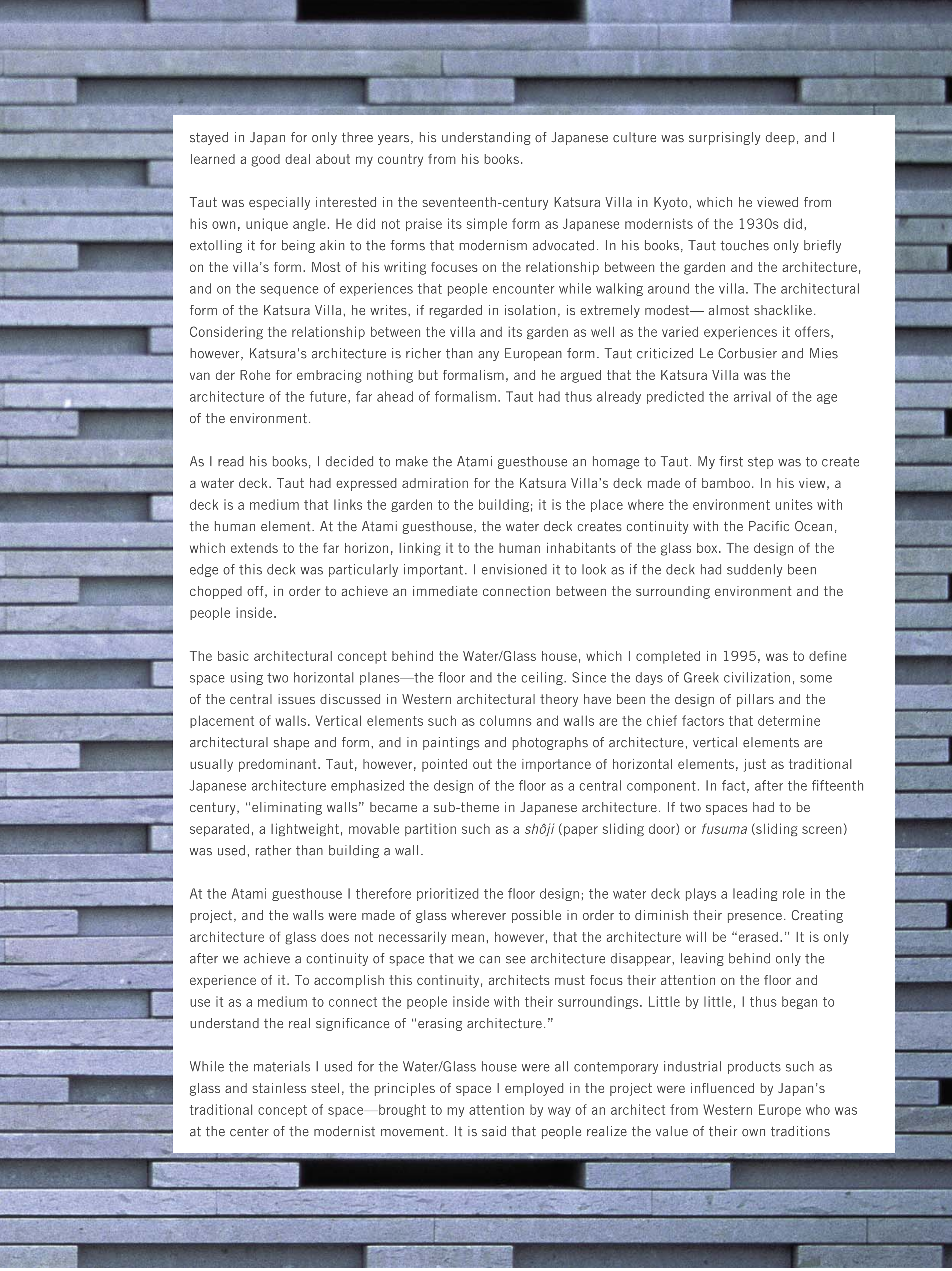
Suddenly, after 1990, everything changed. The economic bubble had burst, and the only jobs that came my way were small-scale projects in provincial cities. The first commission I received outside of Tokyo, in 1993, was to build an observatory atop Mount Kiro on Oshima, a small island in the Inland Sea. The summit had been leveled and was used as a park, and the mayor of Yoshiumi asked me to design an observatory there that could serve as the town’s symbol. I proceeded to make a variety of mockups, ranging from cylinders to cones to glass boxes, but none of them seemed right. Then a thought occurred to me: why not bury the observatory? As long as it was designed as a structure separate from the environment, it would remain a foreign object in its surroundings, no matter what shape or form I used, or what material I employed. So I planned to invert the format itself from convex to concave, and from object to void.

My intention was to embed the building into the mountain by creating a U-shaped concrete form above the park and then restoring the original shape of the mountain over it. Through the process of covering the ground with soil and planting greenery, I was able to create an architectural form that, when seen from above, looked like a slit cut into the earth. Seen from the ground, however, it appeared to be an ordinary mountain.

If the form taken by conventional architecture is an “object,” then this is a “void,” or the exact reverse of an object. An architectural form has been erased. This void, however, embraces a sequence of human experiences. I thus discovered the potential of architecture to act as an experience or phenomenon rather than as an object.

The next important turning point for me came a few months later, when I was asked to design a guesthouse on a lot in Atami, which faced the Pacific Ocean. While I was walking around the premises, a neighbor approached me and told me that a famous architect had designed his house. He invited me to drop by if I was interested. His home looked like an ordinary house from the outside, but when I set foot inside, I was truly amazed by the mysterious atmosphere that pervaded it: it was the Hyuga Residence—also known as the Phantom House—designed by the German architect Bruno Taut (1880–1938).

Taut fled Germany in 1933 and moved to Japan. Although his life in Japan—Germany’s ally during the war—was by no means a happy one, he completed two houses there. One was the house in Atami, which impressed me so much that I began to devour a whole series of books by the architect. Even though he



stayed in Japan for only three years, his understanding of Japanese culture was surprisingly deep, and I learned a good deal about my country from his books.

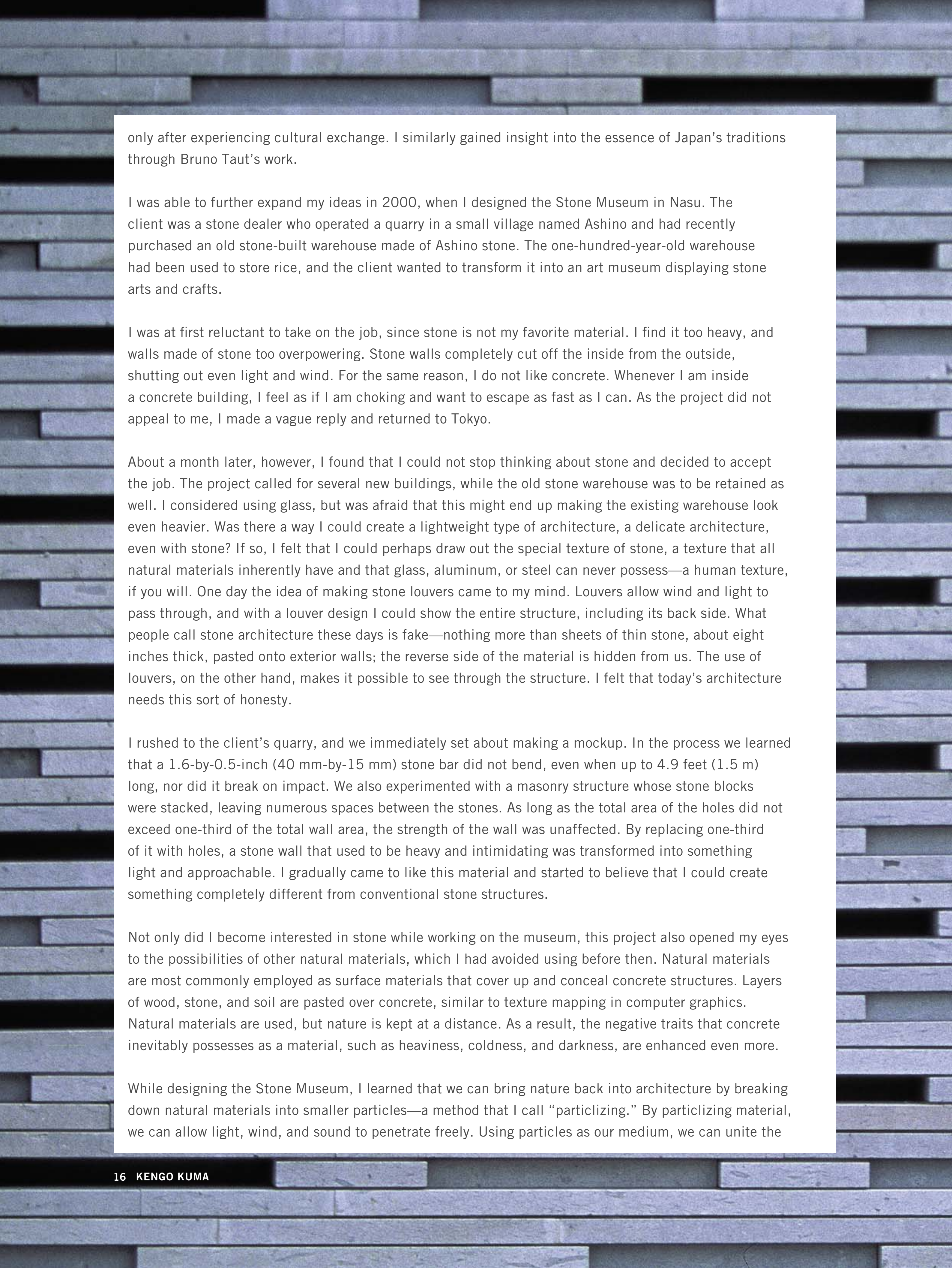
Taut was especially interested in the seventeenth-century Katsura Villa in Kyoto, which he viewed from his own, unique angle. He did not praise its simple form as Japanese modernists of the 1930s did, extolling it for being akin to the forms that modernism advocated. In his books, Taut touches only briefly on the villa's form. Most of his writing focuses on the relationship between the garden and the architecture, and on the sequence of experiences that people encounter while walking around the villa. The architectural form of the Katsura Villa, he writes, if regarded in isolation, is extremely modest— almost shacklike. Considering the relationship between the villa and its garden as well as the varied experiences it offers, however, Katsura's architecture is richer than any European form. Taut criticized Le Corbusier and Mies van der Rohe for embracing nothing but formalism, and he argued that the Katsura Villa was the architecture of the future, far ahead of formalism. Taut had thus already predicted the arrival of the age of the environment.

As I read his books, I decided to make the Atami guesthouse an homage to Taut. My first step was to create a water deck. Taut had expressed admiration for the Katsura Villa's deck made of bamboo. In his view, a deck is a medium that links the garden to the building; it is the place where the environment unites with the human element. At the Atami guesthouse, the water deck creates continuity with the Pacific Ocean, which extends to the far horizon, linking it to the human inhabitants of the glass box. The design of the edge of this deck was particularly important. I envisioned it to look as if the deck had suddenly been chopped off, in order to achieve an immediate connection between the surrounding environment and the people inside.

The basic architectural concept behind the Water/Glass house, which I completed in 1995, was to define space using two horizontal planes—the floor and the ceiling. Since the days of Greek civilization, some of the central issues discussed in Western architectural theory have been the design of pillars and the placement of walls. Vertical elements such as columns and walls are the chief factors that determine architectural shape and form, and in paintings and photographs of architecture, vertical elements are usually predominant. Taut, however, pointed out the importance of horizontal elements, just as traditional Japanese architecture emphasized the design of the floor as a central component. In fact, after the fifteenth century, "eliminating walls" became a sub-theme in Japanese architecture. If two spaces had to be separated, a lightweight, movable partition such as a *shôji* (paper sliding door) or *fusuma* (sliding screen) was used, rather than building a wall.

At the Atami guesthouse I therefore prioritized the floor design; the water deck plays a leading role in the project, and the walls were made of glass wherever possible in order to diminish their presence. Creating architecture of glass does not necessarily mean, however, that the architecture will be "erased." It is only after we achieve a continuity of space that we can see architecture disappear, leaving behind only the experience of it. To accomplish this continuity, architects must focus their attention on the floor and use it as a medium to connect the people inside with their surroundings. Little by little, I thus began to understand the real significance of "erasing architecture."

While the materials I used for the Water/Glass house were all contemporary industrial products such as glass and stainless steel, the principles of space I employed in the project were influenced by Japan's traditional concept of space—brought to my attention by way of an architect from Western Europe who was at the center of the modernist movement. It is said that people realize the value of their own traditions



only after experiencing cultural exchange. I similarly gained insight into the essence of Japan’s traditions through Bruno Taut’s work.

I was able to further expand my ideas in 2000, when I designed the Stone Museum in Nasu. The client was a stone dealer who operated a quarry in a small village named Ashino and had recently purchased an old stone-built warehouse made of Ashino stone. The one-hundred-year-old warehouse had been used to store rice, and the client wanted to transform it into an art museum displaying stone arts and crafts.

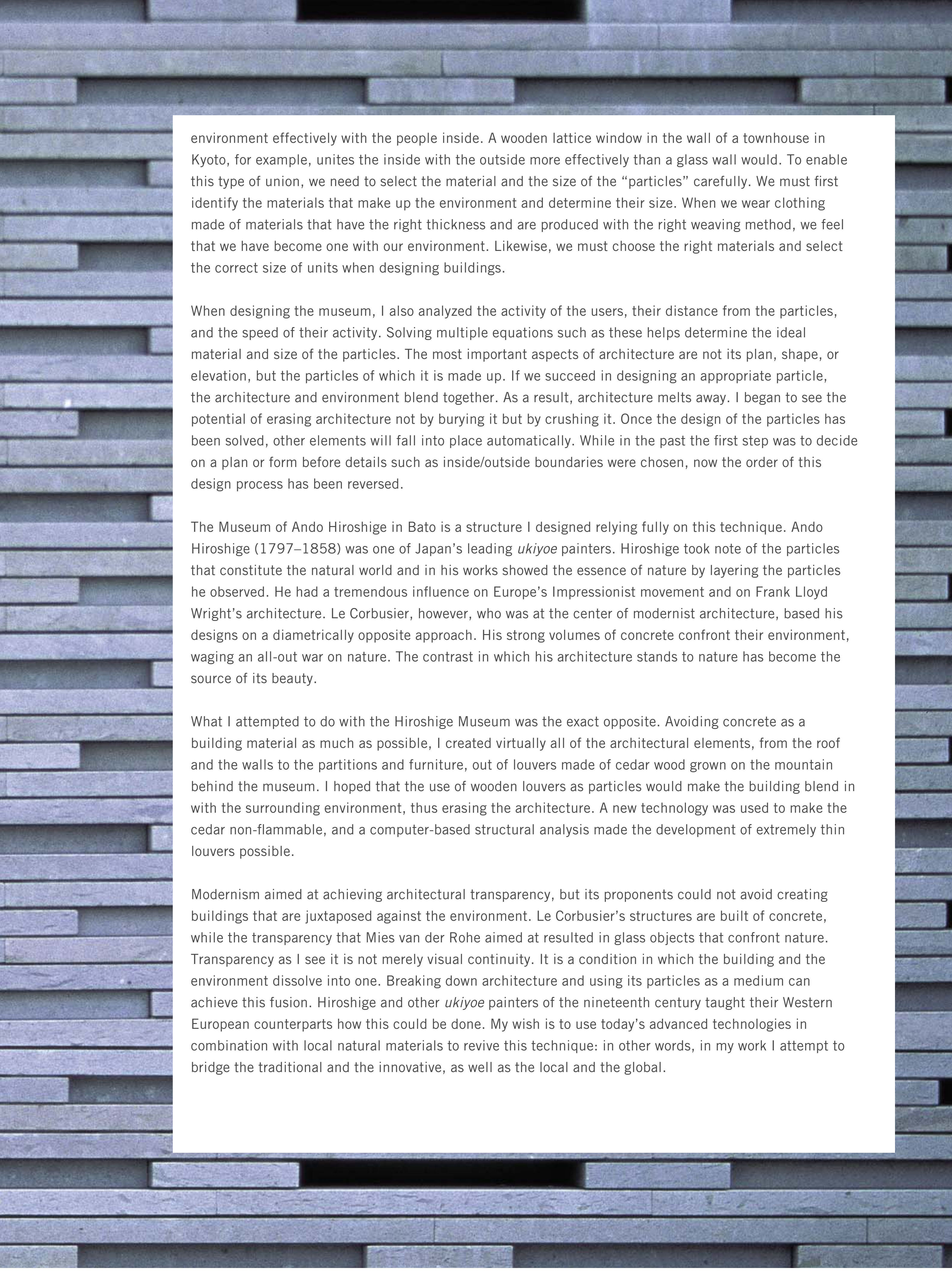
I was at first reluctant to take on the job, since stone is not my favorite material. I find it too heavy, and walls made of stone too overpowering. Stone walls completely cut off the inside from the outside, shutting out even light and wind. For the same reason, I do not like concrete. Whenever I am inside a concrete building, I feel as if I am choking and want to escape as fast as I can. As the project did not appeal to me, I made a vague reply and returned to Tokyo.

About a month later, however, I found that I could not stop thinking about stone and decided to accept the job. The project called for several new buildings, while the old stone warehouse was to be retained as well. I considered using glass, but was afraid that this might end up making the existing warehouse look even heavier. Was there a way I could create a lightweight type of architecture, a delicate architecture, even with stone? If so, I felt that I could perhaps draw out the special texture of stone, a texture that all natural materials inherently have and that glass, aluminum, or steel can never possess—a human texture, if you will. One day the idea of making stone louvers came to my mind. Louvers allow wind and light to pass through, and with a louver design I could show the entire structure, including its back side. What people call stone architecture these days is fake—nothing more than sheets of thin stone, about eight inches thick, pasted onto exterior walls; the reverse side of the material is hidden from us. The use of louvers, on the other hand, makes it possible to see through the structure. I felt that today’s architecture needs this sort of honesty.

I rushed to the client’s quarry, and we immediately set about making a mockup. In the process we learned that a 1.6-by-0.5-inch (40 mm-by-15 mm) stone bar did not bend, even when up to 4.9 feet (1.5 m) long, nor did it break on impact. We also experimented with a masonry structure whose stone blocks were stacked, leaving numerous spaces between the stones. As long as the total area of the holes did not exceed one-third of the total wall area, the strength of the wall was unaffected. By replacing one-third of it with holes, a stone wall that used to be heavy and intimidating was transformed into something light and approachable. I gradually came to like this material and started to believe that I could create something completely different from conventional stone structures.

Not only did I become interested in stone while working on the museum, this project also opened my eyes to the possibilities of other natural materials, which I had avoided using before then. Natural materials are most commonly employed as surface materials that cover up and conceal concrete structures. Layers of wood, stone, and soil are pasted over concrete, similar to texture mapping in computer graphics. Natural materials are used, but nature is kept at a distance. As a result, the negative traits that concrete inevitably possesses as a material, such as heaviness, coldness, and darkness, are enhanced even more.

While designing the Stone Museum, I learned that we can bring nature back into architecture by breaking down natural materials into smaller particles—a method that I call “particlizing.” By particlizing material, we can allow light, wind, and sound to penetrate freely. Using particles as our medium, we can unite the



environment effectively with the people inside. A wooden lattice window in the wall of a townhouse in Kyoto, for example, unites the inside with the outside more effectively than a glass wall would. To enable this type of union, we need to select the material and the size of the "particles" carefully. We must first identify the materials that make up the environment and determine their size. When we wear clothing made of materials that have the right thickness and are produced with the right weaving method, we feel that we have become one with our environment. Likewise, we must choose the right materials and select the correct size of units when designing buildings.

When designing the museum, I also analyzed the activity of the users, their distance from the particles, and the speed of their activity. Solving multiple equations such as these helps determine the ideal material and size of the particles. The most important aspects of architecture are not its plan, shape, or elevation, but the particles of which it is made up. If we succeed in designing an appropriate particle, the architecture and environment blend together. As a result, architecture melts away. I began to see the potential of erasing architecture not by burying it but by crushing it. Once the design of the particles has been solved, other elements will fall into place automatically. While in the past the first step was to decide on a plan or form before details such as inside/outside boundaries were chosen, now the order of this design process has been reversed.

The Museum of Ando Hiroshige in Bato is a structure I designed relying fully on this technique. Ando Hiroshige (1797–1858) was one of Japan's leading *ukiyoe* painters. Hiroshige took note of the particles that constitute the natural world and in his works showed the essence of nature by layering the particles he observed. He had a tremendous influence on Europe's Impressionist movement and on Frank Lloyd Wright's architecture. Le Corbusier, however, who was at the center of modernist architecture, based his designs on a diametrically opposite approach. His strong volumes of concrete confront their environment, waging an all-out war on nature. The contrast in which his architecture stands to nature has become the source of its beauty.

What I attempted to do with the Hiroshige Museum was the exact opposite. Avoiding concrete as a building material as much as possible, I created virtually all of the architectural elements, from the roof and the walls to the partitions and furniture, out of louvers made of cedar wood grown on the mountain behind the museum. I hoped that the use of wooden louvers as particles would make the building blend in with the surrounding environment, thus erasing the architecture. A new technology was used to make the cedar non-flammable, and a computer-based structural analysis made the development of extremely thin louvers possible.

Modernism aimed at achieving architectural transparency, but its proponents could not avoid creating buildings that are juxtaposed against the environment. Le Corbusier's structures are built of concrete, while the transparency that Mies van der Rohe aimed at resulted in glass objects that confront nature. Transparency as I see it is not merely visual continuity. It is a condition in which the building and the environment dissolve into one. Breaking down architecture and using its particles as a medium can achieve this fusion. Hiroshige and other *ukiyoe* painters of the nineteenth century taught their Western European counterparts how this could be done. My wish is to use today's advanced technologies in combination with local natural materials to revive this technique: in other words, in my work I attempt to bridge the traditional and the innovative, as well as the local and the global.

AN ARCHITECTURE OF DISSOLUTION? THE WORK OF KENGO KUMA

BOTOND BOGNAR

INTRODUCTION

Coming of age at different times and responding in divergent ways to the vicissitudes of contemporary life since the end of World War II, generation after generation of talented architects have been shaping the course of Japanese architecture and urbanism, which have by now earned a well deserved recognition in the world. During the past fifty years Japan has rebuilt and modernized itself to become one of the most advanced countries in the world. Its recent stagnation not withstanding, the country is still the second-largest economic superpower, and now, after more than ten years in the doldrums, there are some signs of recovery. The overall remarkable progress, however, has always been accompanied by numerous difficulties; political, social, economic, technological, and cultural upheavals have repeatedly marked the road, and continue to do so as the country enters the twenty-first century in earnest. Some of these problems have been similarly experienced in other advanced nations, while others, derivative of particular local conditions, have been unique to Japan. Yet it is safe to say that whatever the origins of or the driving force behind the changes, their manifestations in Japan have always been much more acute than elsewhere, highlighting in a rather extreme manner both their positive and negative impacts. This is hardly surprising as Japan has been, and still remains, a land of utmost contradictions; nowhere is this more evident than in the architecture of its cities.[1]

In the midst of changing fortunes and often against all odds—and yet sometimes exactly because of them—generations of architects have been able to impact the quality of the built landscape of the country to a remarkable degree. More importantly, their work has in turn been significantly conditioned by the complex and conflicting forces that have steered Japan's rather paradoxical course of modernization and progress from the mid-nineteenth century on, and particularly since the end of World War II.[2] The first postwar generation of architects, led by such talented designers as Kenzo Tange, Kunio Maekawa, and Junzo Sakakura, among others, understandably embraced the rational, minimal style of modernism in their efforts to reconstruct a country under severe economic conditions. In so doing they shared many traits of the revived modern movement with other war-torn countries, where modernism was also the answer to reconstruction and technological progress.[3] Even so, these architects could not avoid the long-standing dilemma of whether

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[1] It needs to be pointed out that what appears to be a contradiction from a Western perspective, is not necessarily viewed as such in Japan. Such understanding of the Japanese is rooted in their traditional worldviews informed by Buddhist philosophy.

[2] Japan's modernization started with the Meiji Restoration in 1868, after the country opened its gates to the rest of the world in 1853 and embarked on the road of rapid Westernization.

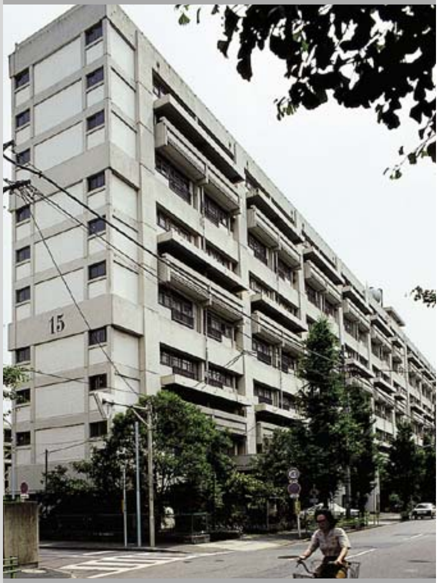

FIG 1
MODERN HIGH-RISE APARTMENTS DESIGNED WITH *TATAMI* AND SLIDING *FUSUMA* PANELS. HARUMI APARTMENTS, BLOCK 15, KUNIO MAEKAWA, TOKYO, 1958

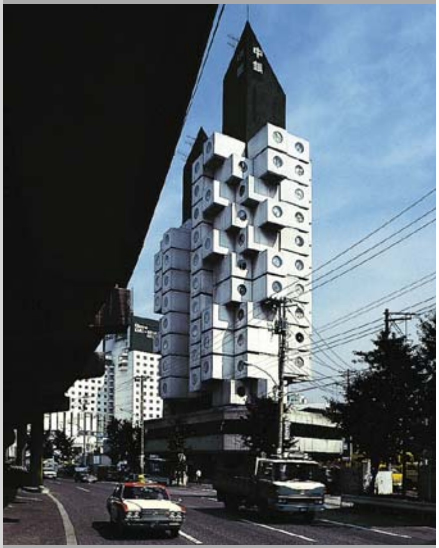

FIG 2.
NAKAGIN CAPSULE TOWER, KISHO KUROKAWA, TOKYO, 1972

or not—and if yes, how—to establish a meaningful relationship between Japanese traditions and international modernity. Combining both in their works, often by way of no-nonsense juxtaposition, resulted in paradoxical solutions that, as Reyner Banham observed, would have been "unthinkable" anywhere in the West.[4] Much that was taking place in Japanese architecture, even during this time of supposedly high modernism, was in fact diverse and part of a largely "impure" movement (fig. 1).[5]

In a similar way, the Metabolism movement of the 1960s and many of its extravagant ideas cannot be discussed without bearing in mind the effects of Japan's tremendous progress in industrialization and the ensuing optimism, self-confidence, and pride that this generation of architects invested in their work. The utopian and unbuilt urban visions, as well as the innumerable built works by Arata Isozaki, Kisho Kurokawa, and Kiyonori Kikutake, which were often influenced by various oriental philosophies, illustrate not only the paradoxical nature of Metabolist architecture, but also its particular attributes—the fearless and, more often than not, undiscriminating application of industrial technology, megastructuring, monumentalization and systematization of design, capsule architecture, interchangeability, and so on—attributes that explain why this movement could not have been realized anywhere else but in Japan (fig. 2).

By the 1970s, the continued onslaught of uncontrolled Japanese industrialization had begun to reveal its destructive capacity, and the worsening environmental and urban conditions, among others, triggered a drastic shift in the course of architecture. With the ideology of modernism bankrupt, postmodernism was ushered in with a vengeance. A new wave of Japanese architects, although much restricted by the emerging energy crisis and economic recession of the time, took widely divergent positions in order to bring an end to the impasse. Acutely aware of the changing times and empowered by their strong desire for self-expression, these architects began to explore uncharted territories in design that had previously been considered taboo. In the broad spectrum of proliferating architectural theories, many radical directions were initiated that had practically nothing in common except their rejection of Metabolist ideas and a sometimes latent, but often explicit, pro- or anti-urban sentiment.[6]

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3. Limited means, little or no industrial production, lack of construction materials, and the diminished labor force prompted most war-torn countries to pursue an economical architecture in their reconstruction efforts. Such minimalism, straightforward functionalism, and structural and architectural rationalism favored the adherence to modernism, which was built on the same principles. The spread of modern architecture in Japan in the postwar years, however, was also derivative of the prewar developments and success of modern architecture in that country.

4. Reyner Banham, "The Japonization of World Architecture," in Hiroyuki Suzuki, Reyner Banham, and Katsuhiro Kobayashi, eds. *Contemporary Architecture of Japan 1958–1984* (New York: Rizzoli, 1984), 21. As Banham wrote, "There are certain usages, shapes, forms, structures, that Western architects would never think to use because they are, literally, unthinkable."

5. Among the numerous examples of such eclectic modernism, none is more evident than the case of Togo Murano (1891–1984), who was equally at home in such diverse styles of architecture as high modernism, traditional Japanese, Scandinavian vernacular, and others, as well as a combination of all of these. However, even the so-called modernists such as Tange (b. 1913), Maekawa (1905–1986), and Kiyonori Kikutake (b. 1928), infused traditional ideas into their architecture, sometimes subtly, sometimes in a more explicit manner.

In its fervent search for architecture's lost meanings, the New Wave movement also revealed that the unfolding postmodernism after the late 1960s, more so than the previous modernism, developed in significantly different ways in Japan than it did in Europe and America. Masao Miyoshi and Harry D. Harootunian correctly pointed out in their book *Postmodernism and Japan* that "to confuse Japan's non-modernity with the West's 'postmodernism' is perhaps a serious error. [This is so, because the] two versions are differently foregrounded in history."[7] This also explains why Tadao Ando's severe minimalism, which erupted on the Japanese urban scene at that time, as well as Fumihiko Maki's articulate contextualism and Minoru Takeyama's populism differed so much from their Western counterparts, although they were, at least partially, inspired by them (fig. 3).

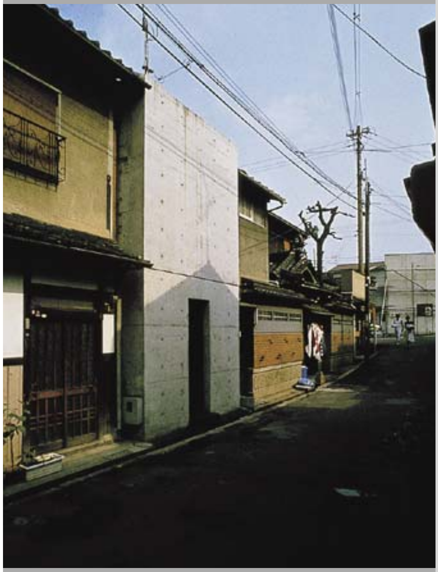

FIG 3.
ROW HOUSE IN SUMIYOSHI
(AZUMA RESIDENCE),
TADAO ANDO, OSAKA, 1976

ARCHITECTURE IN THE 1980S

The onset and splurge of the bubble economy in the 1980s accelerated the trend of across-the-board experimentation, which had begun under different conditions in the 1970s. As Japan was changing from an industrial to an information-based economy, the recession shifted to another economic boom, now bolstered by increasingly rampant consumerism, widespread land speculation, and the skyrocketing of land prices.[8] With large-scale investments in architecture and other profitable urban projects, the most striking change occurred in the field of urbanism. The earlier modernist aversion to the congested and chaotic Japanese city—a strong disdain shared by both the Metabolists and many of the subsequent New Wave architects—was forfeited through the rediscovery and appreciation of the flexibility and volatile dynamics of the heterogeneous and fragmentary urban order that was as much inherited from the past as it was the product of recent developments in Japan. These urban qualities now came to be regarded as creative potentials for a new architecture and were embraced by architects with fervor; Tokyo, acquiring the status of one of the three largest informational world cities, became a model for architecture (fig. 4).[9]

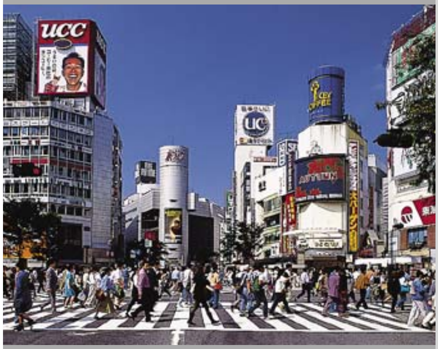

FIG 4.
CITYSCAPE AT SHIBUYA, TOKYO

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6. After Metabolism the technological approach to architecture was largely discounted. As industrial technology overran the city with all its negative impacts on urban living conditions, the city itself became interpreted by many as the enemy, and many architects rejecting the urban context promoted a "defensive architecture." Among them were Tadao Ando and Kazuo Shinohara, for example, while others, such as Fumihiko Maki and Minoru Takeyama, believed that the city, though it was not an ideal place, could still be improved upon by small-scale architectural interventions.
7. Masao Miyoshi and Harry D. Harootunian, eds., *Postmodernism and Japan* (Durham, NC: Duke University Press, 1989), xi.
8. The exorbitant land prices also meant high tax rates on properties. To avoid these taxes, owners had to invest as fast as possible in real estate and construction, which cost only a fraction of the value of the land. The accelerated market economy and the development of architecture as a commodity also resulted in a frequent replacement of relatively recent structures with new ones, whose novelty served as a means of marketing.
9. The other informational world cities are New York and London. Data quoted from Manuel Castels, *The Informational City* (Oxford: Blackwell Publishers, 1989), 340.

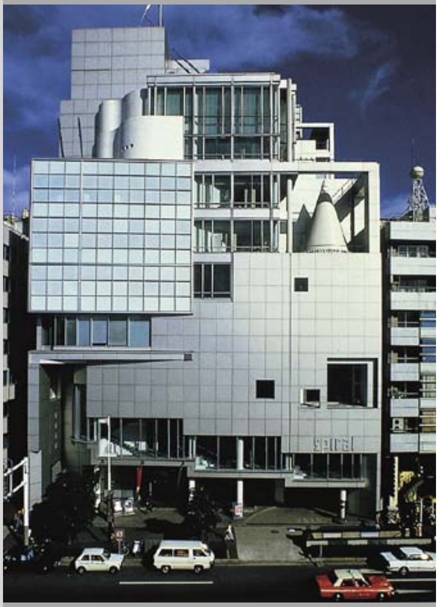

FIG 5.
SPIRAL BUILDING, FUMIHIKO MAKI, TOKYO, 1985

During the 1980s and early 1990s, architects had practically unlimited budgets to work with and enjoyed unrestricted freedom to shape their buildings any way their talent or fancy could afford. During this decade or so of economic frenzy, manipulated real estate markets, and building boom, almost anything could go. The result was an unprecedented excess that yielded not only the largest amount of construction but also the widest possible range in architectural quality. On the one hand, there was a reckless proliferation of flamboyant, overly decorative, and often inferior, trivial, or kitschy designs that both reflected and catered to the reign of commercialism in fashioning the urban environment; on the other hand, a highly innovative, world-class architecture emerged, which was both admired and envied far beyond Japan. There is no doubt that this was the new golden age of Japanese architecture and design.[10] The works of such architects as Fumihiko Maki, Kazuo Shinohara, Tadao Ando, Itsuko Hasegawa, Yoshio Taniguchi, Toyo Ito, and Riken Yamamoto, to mention but a few, attest to such high quality (figs. 5 and 6).

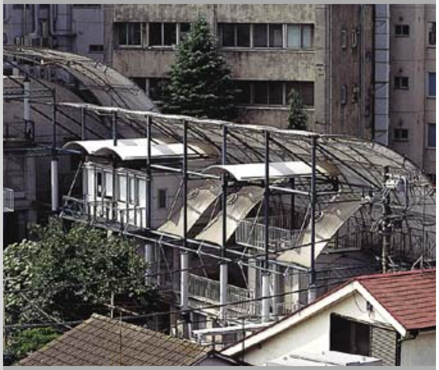

FIG 6.
HAMLET RESIDENTIAL COMPLEX, RIKEN YAMAMOTO, TOKYO, 1988

Although a restrained but recognizable theatrical quality frequently imbued the designs of these architects as well, the works of several others, such as Shin Takamatsu, Kiko Mozuna, and Atsushi Kitagawara, were more explicit in this regard, most of them being overly exaggerated in nature (fig. 7). To understand this disposition of architecture, it has to be added that the already short cycle of construction-demolition-construction in Japan quickened beyond any previously experienced rate during these deliriously accelerated times of Japanese urbanism.[11] Moreover, as a result of the increasing permeation of various information and media technologies into the urban realm, Japanese cities—especially Tokyo—seemed to be turning into virtual stages on which "scenes" changed both rapidly and apparently uncontrollably, radically blurring the distinction between reality and fiction.

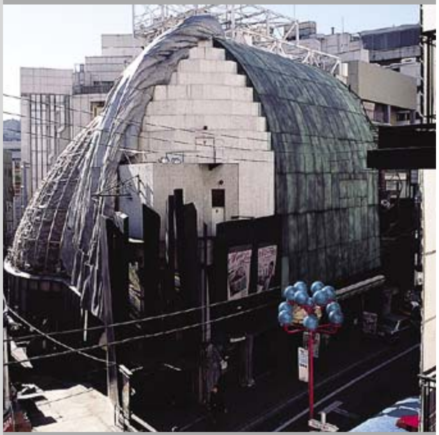

FIG 7.
"RISE" CINEMA COMPLEX, ATSUSHI KITAGAWARA, TOKYO, 1986

Among the generations of Japanese architects who are active today, Kengo Kuma is among those whose careers were launched during the bubble years, but whose architecture actually unfolded and matured only after the bubble burst. Accordingly, these designers had to reorganize their work and strategies, in many cases necessitating a significant shift in direction to meet the changed, more restrictive conditions of the economic recession. Educated in the late 1970s and early 1980s, Kuma and his noted contemporaries, such as Kazuyo Sejima, Shigeru Ban, and Jun Aoki, had little or no direct experience with the Metabolism movement and even less with the earlier modernism.[12] Having come of age in the turbulent but exceedingly affluent and liberal spirit of the 1980s, Kuma's generation, more than most of their predecessors, was nurtured by Japan's intoxication with the prosperity of the bubble economy. This generation was, however, exposed not only to the potentials and creative challenges of the rapidly unfolding new age but also to its pitfalls.

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10. "Japanese Design: The Golden Age," *Times*, September 21, 1987, 40.

11. Many prominent buildings were demolished between the 1980s and early 1990s—some after being in use for only three years—to be replaced with new ones, as was the case with Ito's Nomad Restaurant of 1986 in Roppongi, Tokyo. This trend has continued even after the burst of the economic bubble, albeit at a slower pace.

12. Kazuyo Sejima was born in 1956, Shigeru Ban in 1957, and Jun Aoki in 1956.

The Japanese have been known to eagerly embrace anything that is new, often rather uncritically, one might add.

Kuma's generation enjoyed a headstart insofar as these architects could benefit from the favorable conditions of the thriving economy as well as learn from the pioneering work of their immediate predecessors, who were the first to explore the possibilities of a new architecture that was better in tune with the information age and its new lifestyles. Toyo Ito's more recent designs, especially the astounding Sendai Mediatheque of 2000, are among the best examples of such new architecture (fig. 8). Moreover, Ito, like others of his generation, has actively promoted many younger architects, including Kazuyo Sejima, who started to work in Ito's office and was initially much influenced by his architecture. It is therefore not surprising that many architects in Japan are identified with various informal "schools," formed around charismatic designers by their disciples or admirers. Yet these younger-generation architects have not merely followed the same architectural concepts established by their respective masters, but developed them further and frequently in new directions. In the 1970s and early 1980s, Kazuo Shinohara and Arata Isozaki were regarded by many as such strong leaders.[13] In the same manner, Kuma's generation could not possibly have achieved as much as it has without the groundbreaking and influential work of many New Wave architects.

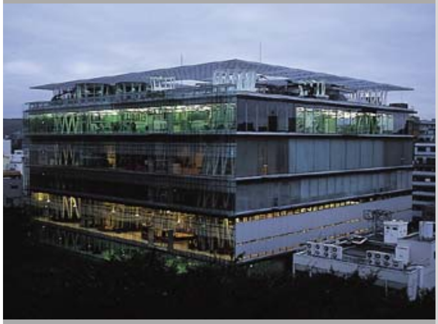

FIG 8.
MEDIATHEQUE, TOYO ITO, SENDAI, 2001

Kuma's research advisor at Tokyo University, where he studied in the graduate school of architecture, was Hiroshi Hara, one of the leading designers of the 1980s and 1990s, who first made his name known with his revolutionary "reflection houses" in the 1970s. Hara also guided the graduate work of Riken Yamamoto and Kiyoshi Sey Takeyama, who, along with Kuma, formed another loosely defined group in Japanese architecture during that time. Hara, from the beginning of his work in both academia and practice, devoted much of his efforts to challenging many of modern architecture's tenets, such as its homogeneous spatial disposition and unity of form. He later became interested in the spatial and formal organizations of vernacular buildings and settlements as an important source for a new contemporary architecture. As part of his research at the university, he organized several study trips to third-world nations; Kuma joined the group that toured several African countries in 1979.

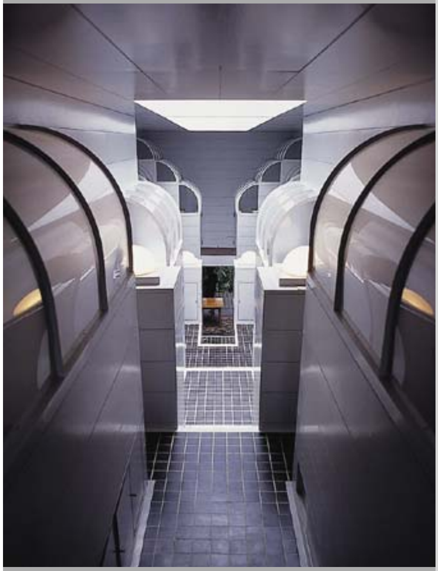

FIG 9.
HOUSE IN MACHIDA, INTERIOR, HIROSHI HARA, 1974

Kuma was obviously attracted to and influenced by Hara's architecture, but affinities between Kuma's aspirations and his mentor's interests are detectable only in some respects, in particular projects, and with different intensities. Kuma has commented about this issue himself:

> Although Isozaki was the star at that time, for me Hara was more interesting because of his curiosity about domestic and vernacular architecture…I was really fascinated by his own house with the black facade and the special interior of the space. I felt

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[13] Toyo Ito, Itsuko Hasegawa, Kazunari Sakamoto, Yuzuru Tominaga, among others are regarded as belonging to the so-called Shinohara school; Jun Aoki, Kijo Rokkaku, and many others worked with Isozaki in his office before establishing their own architectural firms.

> it was perfectly different from the modern architecture of the 1960s and 1970s [fig. 9]. . . . He was working in the Roppongi campus [of Tokyo University], and I was there from 1977 to 1979. I went with Hara to Africa in 1979, [yet already there] I felt the difference between me and him; [he] preferred the desert architecture with strong form and strong plan.[14]

Consequently, discussing Kuma's architecture in regard to Hara's theoretical and practical work, however revealing and important, can only be done within limits; while the two architectures intersect at specific points, they are at the same time very different. Moreover, the ambitions that the two have come to share—an early experimentation with fragmentary compositions, a manifest attraction to the vernacular, and a strong fascination with the phenomenal and virtual in architecture—they have each pursued in their designs in their own distinct ways.

EARLY WORKS: FRAGMENTATION

The development of Kuma's architecture has nevertheless been anything but direct or even. Indeed, his work has progressed through several stages, yielding strikingly divergent modes of design. Some of the changes in his work have been prompted by the changing times and their different conditions for architectural production, while others have been the result of new influences and Kuma's conscious decisions and shifting views within his advancement as an architect. Since his debut on the stage of Japanese architecture in the late 1980s, he has explored the potential benefits of stylistic postmodernism, fragmentary compositions, subterranean constructions, the uncommon application of materials, features of traditional architecture and the vernacular, ecology and nature, phenomenology, the use of media and other digital technologies, and the evocation of lightness together with engendering the virtual in architectural space. A common theme in these divergent ideas has been Kuma's strong tendency toward minimalism within his "ultimate aim…to 'erase' architecture."[15]

Critics less favorably disposed to this constant change have criticized Kuma's attitude as merely trying to be always politically correct or lacking personal conviction and consistency, whereas others have praised his architecture as being highly sensitive and responsive. The issue, however, is more complex than these two extreme positions suggest. While one may criticize a frequent and rushed pursuit of change that is undertaken simply for the sake of novelty, it is important to state that the mere fact of an architect changing directions or pursuing multiple approaches to design should not in itself be a reason for criticism. Rather, it should be the quality of the work resulting from such changes that is thoroughly scrutinized and judged in the context of society's needs and as to how well its invested ideas, beyond meeting the local conditions, can obtain universality.

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[14] Interview with the author, 18 March 2002, Tokyo.

[15] Kengo Kuma, Introduction to this book, 14.

Upon returning from the United States, where he was a visiting scholar at Columbia University in New York from 1985 to 1986, Kuma established his first Tokyo office in 1987. Armed with newly acquired experiences abroad and immersed in Tokyo's dynamic and vastly popular new urbanism, he, like many of his peers, became interested in exploring new responses to the Japanese city. Intending to design structures that fit into the chaotic urban environment, he opted for an architecture of fragmentation. In light of the contrasting ways in which Kuma's architecture has been interpreted, it is interesting to note that this concept was immediately expressed in two diametrically opposite ways. In 1988 Kuma completed his first job, the Small Bath House in Izu, which remains one of his early remarkable designs, and whose many features, including the use of natural materials such as wood and bamboo, would return in some of his later buildings. Although not as refined as his more recent works, this project, combining a private residence with a Japanese bath, is an unpretentious construction with a spatial and formal composition that is as light and refreshing as it is non-monumental (fig. 10).[16]

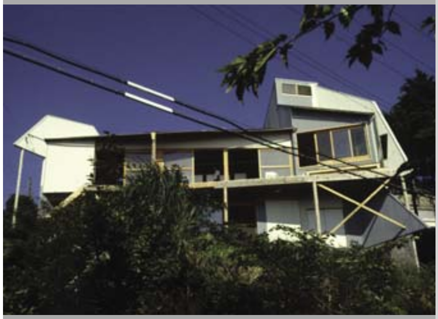

FIG. 10.
SMALL BATH HOUSE,
KENGO KUMA, IZU, 1988

It is perhaps not an overstatement to say that this work by Kuma echoes the similarly fragmentary composition of Hara's first work, the Ito House in Mitaka from 1967, although no direct influence can be pointed out. Kuma's two subsequent commissions called for larger projects, in which his strategy of fragmentation led to completely different results. Both the Doric and the M2 buildings, completed in Tokyo in 1991, employ oversized elements derived from classical architecture and are exceedingly heavy and monumental; they have been shaped by the overly historicizing genre of American postmodernism as defined by Robert Venturi, Robert A. M. Stern, and Michael Graves. A rather bizarre piece of concrete architecture, the M2 is especially (and paradoxically) the ultimate built monumental object that Kuma, according to his own credo, wanted to challenge and do away with from the outset of his career (fig. 11).[17] The two buildings represent a line of architecture in Kuma's oeuvre that he, fortunately, has not followed ever since. In fact, his work since the early 1990s reveals ideas that stand in complete contrast to the monumental historicism that shaped these two projects.

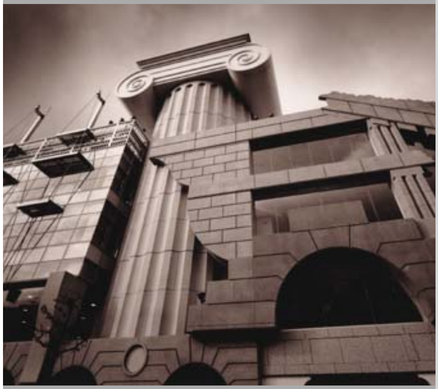

FIG 11.
M2 BUILDING, KENGO KUMA,
TOKYO, 1991

Not counting these two divergent articulations of architectural fragmentation, the first major shift in Kuma's designs occurred just after the completion of the M2 Building. There may be several reasons for the turnaround, including the plausible one that Kuma himself learned a lesson from the less than satisfactory results of these two designs. Another explanation is perhaps more important: many of the changes that started and/or continued to take place in Japan during the early 1990s were a major impetus for Kuma to pursue his search for a paradigm that is more befitting to contemporary Japan—a less intrusive but more flexible architecture.

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[16] Kuma designed this building with Satoko Shinohara of Spatial Design Studio.

[17] Kuma explained that while he was at Columbia University, "In America…a Classicist vocabulary was righteous itself. However, the use of Classicism cannot, of course, justify anything. I don't think building the same thing everywhere is good." Hiroyuki Suzuki and Kengo Kuma, "A Return to Materials," *The Japan Architect* 38 (Summer 2000): 4.

Kuma’s design explorations followed one another in rapid succession, his new ideas often complementing rather than replacing previous ones. Several of his designs were repeatedly applied at different times, with Kuma adapting them to the particular circumstances of each project. Moreover, many of these strategies, being intimately interrelated, have been implemented within the same project, while others have proved to be mutually exclusive. His growing awareness of and response to the landscape and the site, for example, have been almost naturally coupled with an increased interest in nature and natural phenomena. Addressing these issues in his designs has also turned Kuma’s attention to a new notion of “gardening” and to the significance of ecological architecture. On the other hand, his simple and vernacular-inspired designs more often than not preclude the application of the latest electronic and digital technologies, as is the case with the Noh Stage in the Forest (1996) or the Takayanagi Community Center (2000), to cite but two examples. Either way, Kuma’s architecture today reflects, on an increasingly high level, both the needs and aspirations as well as the possibilities of the post-bubble era in Japan.

AFTER THE BUBBLE: NEW DIRECTIONS

The burst of the bubble and the following long-lasting economic stagnation once again changed the stage and the rules for architecture and construction in Japan. Today Japanese architecture, as well as the country in general, finds itself in the process of slow recovery and necessary transition, underlining the close relation of architecture to the social, political, cultural, and economic milieu in which it operates. As opposed to the excessive exuberance of the 1980s and early 1990s that yielded numerous revolutionary designs, the more limited means, the drastically reduced number of construction projects, and the much changed, more sober atmosphere in the country now require a different attitude from designers: more restraint, an emphasis on economical and ecological considerations, a more sensitive use of the available and increasingly sophisticated technologies, in addition to a response to the necessities of the rapidly unfolding new realities in Japanese society.[18]

Coinciding with these conditions in Japan is the growing global trend to return to the minimal aesthetic of early modernism (if not to its monolithic qualities) after the exhaustion of postmodernism’s obsession with the appropriation of representational or historic signs in architecture. Driven by different forces and aspirations, the new minimalism is characterized by lightness and ephemerality. All told, today’s architecture in Japan, developing subtle innovations as it builds upon much of the achievements of its predecessors in the manner of a quiet evolution, is less revolutionary or subversive as was the New Wave movement in the 1970s.

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18. Japanese society today is undergoing a radical transformation that many economists, sociologists, politicians, and others consider as significant as the Meiji restoration and the subsequent modernization of Japan. In addition to the aftermath of the burst of the bubble, along with the shift from an industrial- to an information-based economy and the inroads of globalization, Japan is plagued by the increasing disproportion between its elderly population and the simultaneous shrinking of the birth rate. All of these matters have profound implications on issues such as labor conditions, education, health care, culture, lifestyles, and architecture.

On the other hand, the onslaught of new digital information technologies and the invasion of media into contemporary life continue to alter the ways space is perceived, used, and inhabited. In other words, beyond the changing rules and modes of social interaction within Japan's information society, the relationship between people and their environment is changing as well. This is most obvious in the cities, where mobility and ephemerality have effectively replaced stability and permanence. People, as "urban nomads," are constantly on the move, while being involved in several activities simultaneously.[19] At the same time, the relentless transformations of the urban fabric are pointing toward a new urbanism that continues to be chaotic, defying the principles and ideologies of modernism. Yet, paradoxically, while architecture—as much as Japanese society itself—is in need of more transparency, the city or the built landscape at large, driven by and oversaturated with information and the media, is both restless and "overexposed," as Paul Virilio has observed (see fig. 4).[20]

Due to the rapid progress and advanced state of information technologies, boundaries in today's society are blurred and often completely erased. While hierarchies are questioned and obliterated, the distinction between the private and the public is disappearing, just as much as the difference between figure and ground within the urban fabric is rendered meaningless or made impossible. The instantaneity of communication and the possibility of "occupying" a multiplicity of spaces simultaneously have now further eroded the established sense of reality and the conventional notion of place. Indeed, the more the electronic network spreads across the world, the more the concept of locality changes its significance. Accordingly, what has traditionally been accepted as reality in relation to fiction—an enduring, predictable, and verifiable state of affairs—has to be reevaluated; today it is often impossible to tell apart the real from the virtual. Or, one might say, the sense and definition of the real has been (and is still being) shifted, at a much faster pace than ever before.[21]

Architects have reacted to these rapidly unfolding changes and the ensuing challenges they face in different ways, thus polarizing the field of architectural production. On one end are those who look upon the new developments with an explicitly negative attitude or complete disregard, immersed in a tenacious nostalgia for the past; on the other end are those who have wholeheartedly but uncritically embraced the novelties the new information age offers. Between these two extremes stands a growing number of

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[19] "Urban nomad" is a term used in Gilles Deleuze and Felix Guattari, *A Thousand Plateaus*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987).

[20] Paul Virilio, *Lost Dimension*, trans. Daniel Moshenberg (New York: Semiotext(e), 1991), 9–27. Virilio observed that the media screen has become the city square (the public forum).

[21] It has to be noted that our sense and understanding of reality have always changed according to the many factors that shape everyday life and our perception of ourselves in it. What is different today is the complex nature of the conditioning forces and the increasingly fast pace with which they impact human life. Traditional Oriental philosophies, including Buddhism, interpreted reality as a non-dual condition in which all distinctions merge. Accordingly imagination, dreams, and all intangible phenomena are also part of our perceived reality.

Japanese designers who acknowledge the inevitability as well as the emerging potentials of the new state of affairs in today's society, while bearing in mind the many pitfalls that come with it—the easy and frequently cheap seductions and banalities, as well as the many uncontrolled excesses.

These architects accept as new reality the fact that today's society operates in different ways as it is shaped by much more complex forces than before. They seek to engage these new conditions by discovering and utilizing their means in architecture. In other words, these architects share in more than one way the accurate diagnosis and prediction of Ignasi de Solá-Morales, who wrote:

> The places of present-day architecture cannot repeat the permanencies produced by the force of the Vitruvian *firmitas*. The effects of duration, stability, and defiance of time's passing are now irrelevant. The idea of place as the cultivation and maintenance of the essential and the profound, of a *genius loci*, is no longer credible in an age of agnosticism; it becomes reactionary. Yet the loss of these illusions need not necessarily result in a nihilistic architecture of negation. From a thousand different sites the production of place continues to be possible. Not as a revelation of something existing in permanence, but as the production of an event.[22]

Kengo Kuma belongs to this latter group of architects. Realizing that the requirements of the information age and the rapidly transforming Japanese society cannot be met by the modernist or postmodernist paradigms of architecture, Kuma has been advocating nothing less than the erasure of architecture with and within his work. Taken at face value, such intention would amount to an utmost paradox: in order to renew or save architecture, it has to be done away with. Even if the statement is not to be taken literally, as surely is the case, the question remains: what does Kuma mean by "erasing" architecture, or, more importantly, how does he achieve this goal in his designs? As is expected, Kuma's work, in search for a new paradigm of place and architecture, provides us with not one but a multiplicity of answers.

Reviewing the results of his M2 Building, Kuma came to the conclusion that "whether or not a work disappears depends, not on the state of chaos of the work in question, but on the direction and frame of vision of the person doing the extracting."[23] In other words, any part of a continuously chaotic phenomenon—such as a building in its environment—when viewed from the position of an outsider, is bound to be framed or extracted, and so, is turned into a discrete object that would stand out from its context.

Kuma soon realized that it was wrong to proceed with the position of an outsider in mind, creating an object and then trying to make it disappear or blend into its environment. He commented upon this with the following words: "When I designed the

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[22] Ignasi de Solá-Morales, *Differences*, as quoted in the *Harvard Design Magazine* (Fall 1997): 2.

[23] Kengo Kuma, "Digital Gardening," *Space Design* (November 1997): 6.

M2 Building…I believed that if I created an architecture of fragmentation, the building would dissolve and blend into the chaos that surrounded it."[24] He added elsewhere, "Between 1986 and 1991 my approach to the design of architecture was based on that idea."[25] In later designs, he began to reverse the direction of viewing—that is to say, he tried to engender an environment where the perceiver would always be in the position of an insider. One of the ways in which he achieved this was by blurring the distinction between inside and outside. Yet he went even further, questioning the primacy of vision in perceiving the environment, a notion that was to have broad implications on his subsequent designs.

RETURN TO THE LAND: BURYING ARCHITECTURE

After the early 1990s, Kuma began to investigate architecture's relationship to its environment, stating, "I try to listen as carefully as possible to the site."[26] To prevent the architectural structure from intruding on the site and to remove it from sight, his first and simplest solution was to bury it in, or cover it with, the land. With this new approach to design, the pursuit of fragmentary compositions disappeared from Kuma's work, to be replaced by much simpler, more minimalist models of architecture.

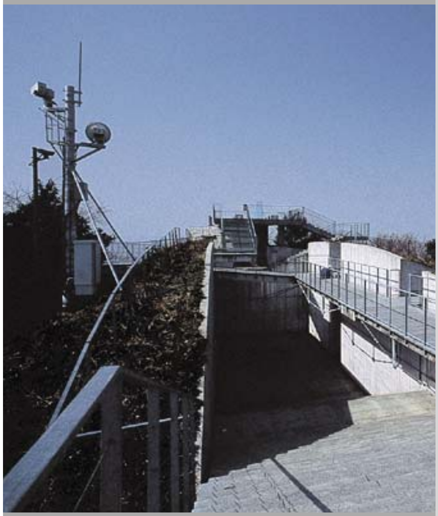

FIG 12.
KIRO-SAN OBSERVATORY, KENGO KUMA, YOSHIUMI, 1994

The opportunity to implement this new design direction was provided by Kuma's 1991 commission to design the Kiro-san Observatory, which he completed on a small island north of Imabari City in 1994. Instead of crowning the top of the mountain with a common, towerlike structure, he embedded the building in a crevice at the top of the mountain with only two platforms projecting from it. Complementing the project with a hidden passage, slender bridges, and a wide stairway that doubles as a seating area for ad-hoc performances, Kuma succeeded in configuring an unusual but successful solution, wherein architecture literally disappears (fig. 12). He followed the same approach in several other projects that allowed for a subterranean architecture.

In his 1992 proposal for the new Japan Museum in Tokyo, the large complex is sunken entirely into the ground in the Shiodome area, which was a vacated train yard at that time. Articulated with parallel rows of large glass panes and skylights, the structure is organized along an automated transportation network inside featuring small, computer-controlled units, so-called "art vehicles." This project is thus another example of Kuma's underground architecture as well as his first work that adheres not only to a simple minimalism with a high-tech network, but also to a rigorous, even rigid, spatial and formal system. Kuma's Kansai-kan National Diet Library competition entry of 1996 was conceived along similar ideas, although here the large, slanting roof of the building tilted into the land. Alternating with extensive skylights are tree-lined green areas on

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24. Introduction to this book, 14.

25. Kuma, "Ditigal Gardening," 6.

26. Suzuki and Kuma, "A Return to Materials," *The Japan Architect* 38 (Summer 2000): 4.

the roof, forming a small park, which contributes to the design of an architecture that is shaped as a carefully textured continuation of the natural land.

The combination of natural setting and high technology is also at the center of another unrealized scheme, the Memorial Park of 1997, dedicated to the late employees of a private company in Gumma Prefecture. Sunken into the ground, the park (essentially a small garden) is organized along sloping paths lined with glass panes etched with the names of the deceased. In addition, interactive computer technology is employed to evoke memories of the dead. The spatial design brings to mind Maya Lin's powerful 1982 Vietnam Memorial in Washington, D.C., which uses a similarly minimalist arrangement. Although the lightness and non-monumentality of Kuma's scheme provide a meaningful alternative to Lin's heavier stone memorial, its planned multimedia simulation, surely a new idea, could have run the risk of turning the act of remembering into a less than solemn experience.

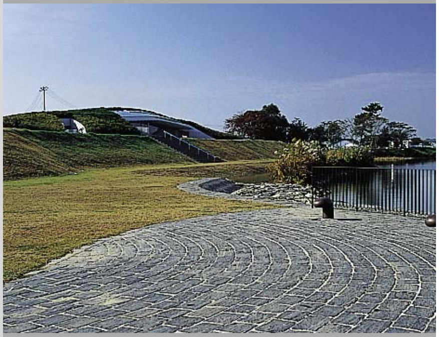

FIG 13.
KITAKAMI CANAL MUSEUM, KENGO KUMA, ISHINOMKAI, 1999

There is no such risk involved at the Kitakami Canal Museum, which in its underground exhibition space also uses interactive computer monitors and video footage to introduce the canals of the world to the visitors. Designed at about the same time as the Memorial Park, and completed in 1999, the museum is burrowed completely in the embankment of the Kitakami River and covered by a park with vegetation and a pedestrian path. In addition to protecting the landscape, Kuma's careful opening of the museum's upper level toward the view of the river and the nearby canal is an effective example of the museum's second theme—the need for and possibility of nurturing a judicious relationship between man-made structures and the natural environment (fig. 13).

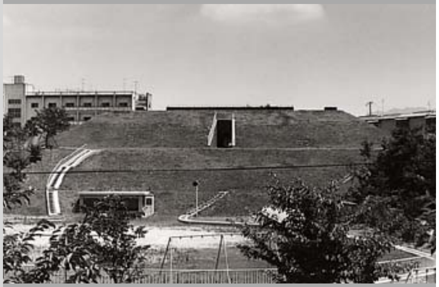

FIG. 14.
PL KINDERGARTEN, TAKEFUMI AIDA, TONDABAYASHI, 1973

Given their site conditions, these completed underground projects impressively present simple and highly successful, if not entirely new, solutions. Variations of subterranean architecture have been created since the early times of human civilization. They were also explored by the Japanese New Wave, as well as by several architects such as Ando and Takamatsu, in many of their more recent works, including (respectively) the Garden of Fine Arts of 1994 and the Higashi-Honganji Reception Hall of 1998, both in Kyoto. Among the earlier examples Takefumi Aida's "architecture of silence" from the 1970s comes to mind, one of his utmost minimalist designs. Silence was understood by Aida as "negative communication" and as a particular function of architecture as language. Aida's investigations of this idea included the underground design of the PL Institute Kindergarten of 1973, whose plain, truncated pyramidal volume was covered entirely by earth and grass (fig. 14). The comparison between this building and Kuma's projects underscores the fact that disparate theories or ideologies can often lead to similar, if not identical, strategies and results. Yet it is to Kuma's credit that he was able to enrich the ancient but continuing genre of subterranean architecture with attractive new dimensions.

VISUAL AMBIGUITY: GLASS

Kuma’s Water/Glass project (1995), a company guesthouse in Atami, is the first instance of his next approach to erasing architecture. Impressively, it is designed in a way that makes it virtually impossible to experience any of its elevations. Built on a small but steep site on the hills of Atami, the building reveals only its entry elevation to the outside, but even this elevation presents merely a blank wall as its facade. In other words, the outer appearance becomes irrelevant in this project. Here Kuma was able, almost by default, to achieve his earlier goal of providing only interior views of both inner and outer landscapes that are framed by his architecture.

Yet in this truly spectacular building, with its breathtaking views of the vast sea below and the changing spectrum of light within, even this framing is largely done away with. One-story-high glass surfaces connect the interior effortlessly with the surrounding pool of water on the roof deck below, whose surface joins, by visual extension, that of the sea and the horizon beyond. Seemingly floating over this pool of water, the oval-shaped glass lounge on the third floor enhances the sense of openness and weightlessness (fig. 15). Despite this simple but effective modernist arrangement, the Water/Glass guesthouse is an eclectic building insofar as the other two levels are designed in a different genre that compounds the use of glass and water with various references to traditional Japanese interiors. Rather than diminishing the design, however, this masterful juxtaposition actually enhances the project, while retaining its delightful overall lightness.

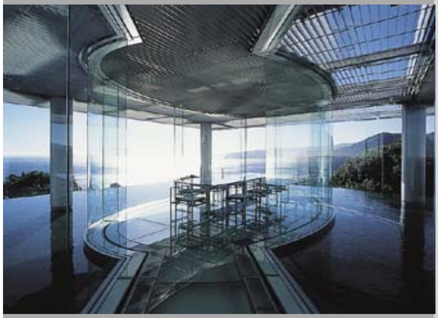

FIG. 15.
WATER/GALSS GUESTHOUSE, KENGO KUMA, ATAMI, 1995

Using both water and glass in significant ways, this project is also the first in Kuma’s œuvre to establish a specific design theme, as indicated by the name of the building. Many of his subsequent designs have been similarly guided by such overarching themes, with their names referring to the site, the used material, or a design issue, such as the River/Filter, Wood/Slats, Sea/Filter, Water/Slats, and Forest/Floor, to name a few.

Glass, in addition to numerous other materials, plays a significant role in Kuma’s “disappearing” architecture. The increased and exclusive use of glass is a general tendency today and is not limited to Japanese architecture. There are two reasons for the new popularity of glass: firstly, although glass has been an important element of architecture for a long time, there are now many new glass products to choose from; secondly, architects today are more sensitive to the fact that glass is always caught up between the various phenomena that take place on its two sides, and are eager to experiment with a new type of transparency while developing increasingly ambiguous definitions of enclosure. Unlike the previous modernist use of glass, the new mode engenders a paradoxical opaque transparency, with glass revealing as much as concealing, depending on shifting interior and exterior conditions. Glass, more than ever before, is carefully yet deliberately used as a “virtual” surface on which events are inscribed as they are reflected on and/or filtered through it. As active but constantly variable agents of such transactions, these glass surfaces contribute to the fluid and fluctuating quality of space, which they help to simultaneously evoke and erase. As a result, boundaries are blurred not only between inside and outside but also between what is perceived as real and virtual.

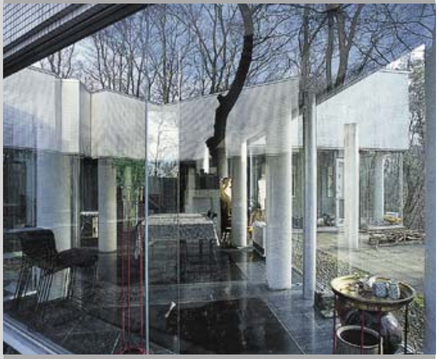

FIG 16.
KENJU PARK FOREST HOUSE, HIROSHI HARA, NAKANIIDA, 1987

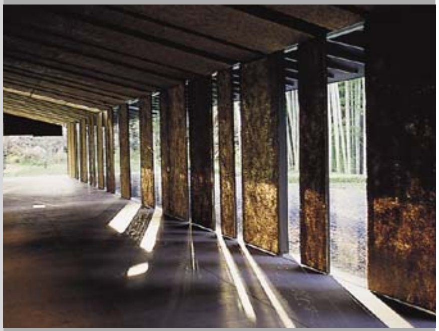

FIG 17.
NASU HISTORY MUSEUM, INTERIOR, KENGO KUMA, NASU 2000

Among the Japanese architects who experiment with glass, Kuma's early mentor, Hiroshi Hara, needs to be singled out again as one of those who have been most active and successful in this regard. His designs for the Tasaki Museum of Art (1986), Kenju Park Forest House and Yamato International (both 1987), as well as the Yukian Tea House and Iida City Museum (both 1988) are the best examples of this trend in his architecture (fig. 16). Kuma's Water/Glass project benefited much from the special application of glass, and he has continued to use glass in later projects, the most prominent among them being the Glass/Shadow, a golf club in Tomioka, Miyagi Prefecture (1996); the Grass/Glass Tower project in Tokyo (1997); the Awaji Service Area in Hyogo Prefecture (1998); the Sakushin Gakuin University in Utsunomiya, Tochigi Prefecture; the Nasu History Museum (fig. 17); and the Museum of Ando Hiroshige in Bato, Tochigi Prefecture (all from 2000); and the redesign of the Shibuya Station facade in Tokyo (2003).

FILTERED SPACE

It should be noted that in all of these projects other design strategies have complemented the effects of glass to heighten the ambiguous evocation of both enclosure and spatial experience, and in so doing, contributing toward the erasure of architecture. One of these strategies has been the use of a large number of thin elements, or slats, as a means of partitioning between inside and outside or between other spatial units. The handling of these repetitive elements, made up of various materials such as metal, plastic, bamboo, and wood, has become so important in Kuma's architecture that he even coined a new word for it: "particlization."[27]

Kuma understands his slat arrangements not as an additive or cumulative use of thin elements, but rather as the opposite: the unified and monolithic entity of a particular material is broken down into its elementary particles. Such discontinuous continuity of a material is then expressed in a variety of thin screens or filters. The slats first appeared in his architecture only partially, in the form of horizontal stainless-steel louvers, as seen for example in the Water/Glass guesthouse, where such louvers are used under the multilayered glass roof of the oval lounge and as part of the overhanging roof above the water surfaces in front of the third-floor guest rooms. Glittering in the sunshine and reflected in both the glass and water surfaces, while filtering light and views of the sky in various degrees, these louvers bring about one of the most vibrant and elusive spatial phenomena. Rather than creating a physical entity or object, in this project Kuma was able to design architecture as atmosphere.

The Kitakami Canal Museum shows a similar solution. The canopy over the arched glass facade and entrance, as well as much of the interior and exterior partitions and benches are made of thin, stainless-steel rods. The application of metal louvers became more extensive in the Glass/Shadow project, where its intended purpose was, even more so than before, to “de-emphasize the solidity of architecture and replace it with the transparency of a floating image of glass,” as Kuma stated (fig. 18).[28]

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[27] Kengo Kuma, "Relativity of Materials," *The Japan Architect* 38 (Summer 2000): 86.

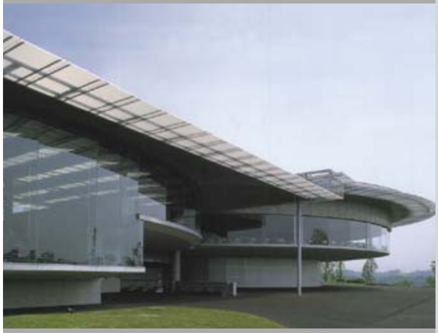

FIG 18.
GLASS/SHADOW GOLF CLUB HOUSE, KENGO KUMA TOMIOKA, 1996

When opportunity allowed, Kuma turned to the natural materials of wood and bamboo for the design of his slats. Such was the case in buildings that by nature of their programs were more traditional. The first of these commissions was a Japanese noodle shop and restaurant along a small river in Fukushima Prefecture. This building, the River/Filter (1996), was followed by the Noh Stage in the Forest (1996); the Wood/Slats, a small guest house in Hayama (1999); and more importantly, the Museum of Ando Hiroshige in Bato-machi (2000); as well as many others thereafter. In some of these designs the use of wooden slats is only partial, but in others, such as the Wood/Slats and Hiroshige Museum, it is so extensive that practically the entire building is configured of the slats. In all of these projects Kuma relies on repetition, both in terms of the repeated use of one linear element and in terms of strategy—many of his buildings are conceived with the use of slats, and in some cases with overwhelming intensity.

His large-scale application of slats and the further implications of “particlization” should be seen in relation to Kuma’s goal of erasing architecture. Breaking down the material surfaces of a building in this way renders its boundaries as various screens, which filter the surrounding environment into the interior of the structure, as is most poignantly demonstrated by the River/Filter project. Wooden screens, woven with different densities, make up the building’s variably layered facades, ensuring that the architectural space is continuous with the surrounding natural environment in an ambiguous manner. The architecture opens to the outside—the river and the landscape beyond—but is also protected from the western sun, while providing privacy where necessary. As natural phenomena are filtered into the building, space is activated in a constantly shifting manner. This is particularly the case with light, which is simultaneously transmitted and intercepted as it is caught up on the screens, illuminating their delicate texture. Depending on the light conditions, the slats alter their presence, appearing and disappearing over the course of a day. Kuma’s particlization thus undermines the monolithic and objectlike appearance of architecture, which, now less definitive or solid, emerges as more permeable, phenomenal, and ephemeral.

Gregg Lynn, borrowing the terminology from a nineteenth-century technique of painting, particularly that of Georges Seurat (1859–1891) and Paul Signac (1863–1935), called Kuma’s dense surface texturing a form of “pointillism.”[29] A more appropriate contemporary analogy, however, is pixilation or digitization, although Kuma’s facades and other surfaces can equally remind us of the now widely used barcodes. In either case, the result of Kuma’s modus operandi of particlization is not unlike the workings of the computer and its digital technologies. Accordingly, these buildings are comparable to low-resolution prints of images that are increasingly out of focus or in the process of fading. Kuma seems to present us with a fragile architecture that can—theoretically, at least—dissipate like a cloud and become continuous or one with

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[28] Kengo Kuma, “Glass/Shadow,” *Space Design* 11 (1997): 70.

[29] Gregg Lynn, “Pointillism,” *Space Design* 11 (1997): 46.

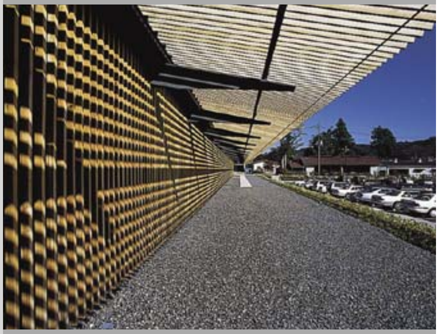

FIG 19.
ANDO HIROSHIGE MUSEUM,
KENGO KUMA, BATO-MACHI 2000

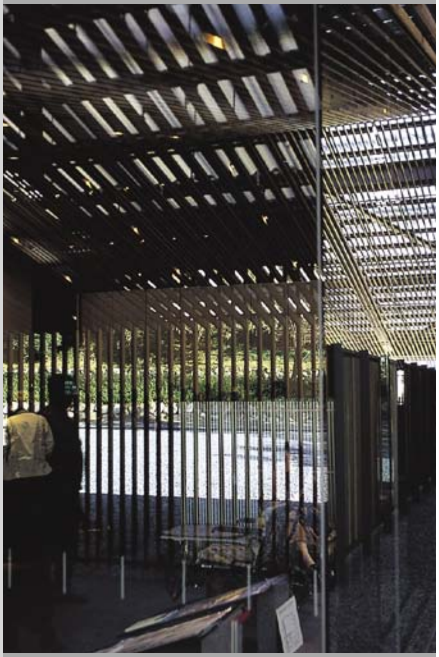

FIG 20.
ANDO HIROSHIGE MUSEUM,
INTERIOR, KENGO KUMA,
BATO-MACHI 2000

the landscape. As Kuma has continued on the road to dissolving his architecture, he has gradually neutralized the overall forms of his buildings, which are now much simpler and often truly minimalist. Today, rather than fragmenting form, Kuma fragments materials (fig. 19).

As a result of the cumulative effects of the use of reflective glass, the play with translucency and transparency, and the strategies of layering and filtering, the spatial quality of Kuma's works has gained a fascinatingly elusive fluidity. As Kuma has written, he wants "to create a *condition* that is as vague and ambiguous as drifting particles."[30] Using the various and often ephemeral surfaces as screens that display information, as for example in the interiors of the Hiroshige Museum, their visual qualities become "very similar to the properties of computer images that are often referred to as liquid in their spatiality," as Lynn has commented (fig. 20).[31] If this is so, one can recognize an interesting though not accidental convergence between Kuma's and Toyo Ito's architectural works. Ito, referring to his recent architecture, and especially to the Mediatheque in Sendai, talks about his intention to create spaces that are "aqueous," wherein activities and events appear to float; accordingly, the undulating lattice-like tubular shafts in the building are designed to look like drifting seaweed. The universal consistency of such space is inflected by the unpredictable density of flows, while its boundaries are continuously shaped by the pressures of events within and without, as well as throughout. Realized as a field of fluctuations, architecture here is bound to be tentative and transient. Ito has arrived at the conclusion that in the age of electronic technologies and communication, the only possibility for him as an architect is to "blur architecture."[32]

Ito is certainly an influential architect, yet the shared qualities of simplicity, lightness, and ephemerality in his and Kuma's designs, are not an indication of Kuma working under Ito's direct influence, as their otherwise rather different architectures clearly underscore. However, it surely means that both architects are equally aware of the changing conditions of architecture and have charted, albeit along different paths, similar if not exactly identical destinations for their designs. In their work—as to some degree also in the works of such architects as Kazuyo Sejima, Ryue Nishizawa, Keiichi Irie, Riken Yamamoto, Shoei Yoh, Jun Aoki, and Makoto Sei Watanabe—architectural space gains, in one way or another, a particular affinity with digital space; hypothetically, space or architecture could appear or disappear as if on a monitor screen, depending on the shifting field of events and the actions of the participating or experiencing person.

One is reminded of dance or pantomime, where movement and action generate space that is both fluid and temporary. Needless to say, in architecture, where materials can

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30. Kengo Kuma, "Dissolution of Objects and Evasion of the City," *The Japan Architect* 38 (Summer 2000): 58.

31. Lynn, "Pointillism," 47.

32. Toyo Ito, *Blurring Architecture*, exhibition catalog (Milano: Edizione Charta, 1999).

be substantially reduced but never completely eliminated, this is a condition that can only be approximated, although some recent designs such as Ito's Silver Hut (1984) and Sejima's Platform Houses (1987 and 1988) come very close (fig. 21). These projects also demonstrate that the more insubstantial or minimalist the design is, the better it can achieve this condition. Kuma's Nasu History Museum, and even more so, his Horai Onsen Bath House in Atami (2003), as well as some of his other buildings support such an argument.

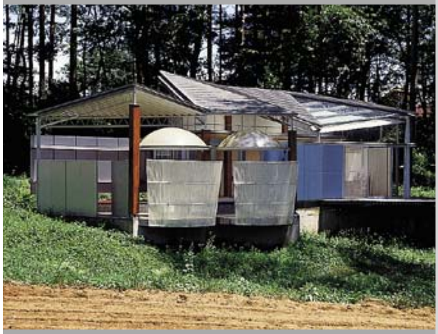

FIG 21.
PLATFORM HOUSE NO. 2, KAZUYO SEJIMA, YAMANASHI PREFECTURE, 1988

RELATIVITY OF MATERIALS—CHALLENGING TRADITIONS

Kuma's designs critically engage the materiality of architecture in order to challenge its usual meanings, and in so doing, to thwart the emergence of architecture as an object. As he has shown in many of his projects, Kuma is determined to "dissolve" the materials that he uses, or to choose materials that are less substantial, stating "If materials are thoroughly particlized, they are transient, like rainbows."[33] In his remarkable project for the Stone Museum in Nasu (2000), the use of stone, one of the most ancient and solid materials, was unavoidable, as it was the specific request of the client, the owner and operator of a quarry not far from the building site. After a process of extensive experimentation in collaboration with the expert owner, Kuma was finally able to cut the stone into long, thin layers, which he applied once again as horizontal slats, creating a porous wall system (fig. 22).

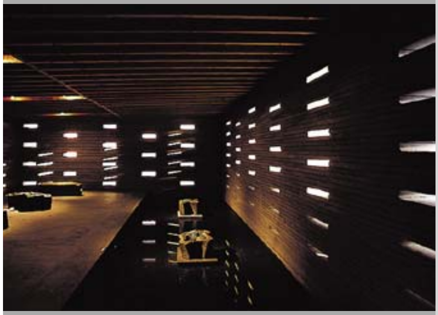

FIG 22.
STONE MUSEUM, INTERIOR, KENGO KUMA, NASU, 2000

Kuma's additions complement the existing old and monolithic stone buildings with new and permeable structures of stone lattice that, although they do not exactly disappear, seem almost weightless and, when viewed across the shallow reflective pool, appear to be virtually floating. The Stone Museum can be likened to Peter Zumthor's Thermal Bath (1996) in Vals, Switzerland, by which it was most likely inspired (fig. 23). The Thermal Bath had also been conceived entirely of stone slats, but its horizontally textured tactile surfaces add up to more solid walls than Kuma's louvers at the Stone Museum do. The permeability of his stone walls are more reminiscent of the Dominus Winery in California (1998) by the Swiss team Herzog & de Meuron, although the winery's walls, too, are heavy.[34] Kuma used stone again in his Museum in Nagasaki (2004), where vertical stone louvers help to achieve a sense of lightness.

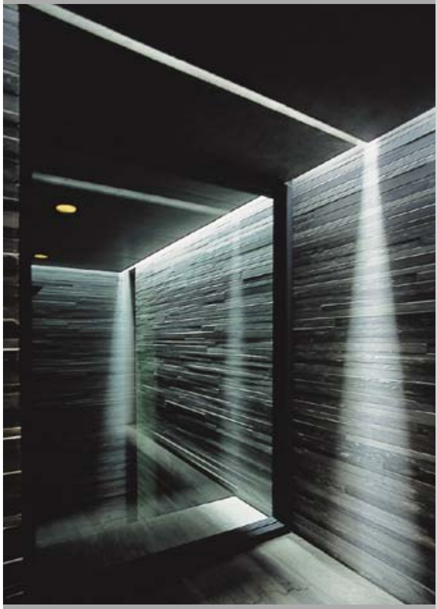

FIG 23.
THERMAL BATH, PETER ZUMTHOR, VALS, SWITZERLAND, 1996

The application of new materials and the uncommon use of old materials are not limited to Japan, but both have been so extensive here that much of the recent success achieved by Japanese architects can be attributed in large part to those devices. Among the growing number of new materials, many architects have experimented with Teflon fiber fabric, Polycarbonate, LC glass, cardboard, paper, corrugated metal, perforated aluminum, in order to configure lighter structures and more fluid and ambiguous spatial

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[33] Kuma, "Relativity of Materials," 86.

[34] In the Dominus Winery building the stones are held in place with gabions or steel-mesh screens to prevent them from falling. The stones were selected according to their size; lower parts of these unique walls are more solid, whereas the upper ones are more porous.

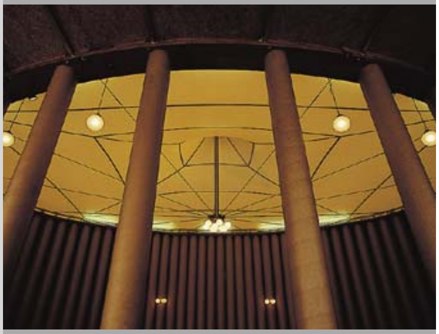

FIG 24.
PAPER CHURCH, SHIGERU BAN, KOBE, 1995

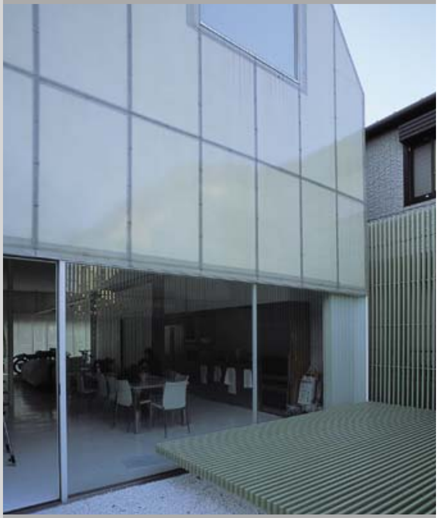

FIG 25.
PLASTIC HOUSE, COURTYARD, KENGO KUMA, TOKYO, 2002

matrices. Shigeru Ban has long been advocating the use of large cardboard tubes, which he used for his Paper Church in Kobe (1995) and the Japanese Pavilion at the Expo 2000 in Hannover, Germany, among other examples of his "paper architecture" (fig. 24). Shuhei Endo, on the other hand, has started to use ordinary corrugated metal sheets in unusual, fluidly curving, and often spiral shapes.

Following the general trend, Kuma has over the years investigated many new and old materials, including plastic, translucent Poly-Hydra-Block (PHB), bamboo, plastered straw, dried vines, paper, and, to a lesser extent, brick and concrete. One of his recent projects, the Plastic House, a small private residence in Tokyo (2002), is built almost entirely of glass fiber reinforced plastic (FRP). Kuma used this material both in the form of long slats and thin sheets, utilizing in either case its inherent translucent qualities (fig. 25). In Kuma's works plastic sheets are often used together with Japanese paper (*washi*), which, while protected from damage by the more durable plastic, gives a fine texture and modulated translucency to the surface. Lit from behind, the sheets start to glow so that the entire building becomes a glowing volume of light, as seen in the Plastic House as well as in the Yusuhara Visitors' Center of 1994, where Kuma used this effect for the first time.

As a result of Kuma's treatment of materials—bringing them to life while increasing the tactility of their surfaces—his architectural spaces become endowed with a sensuous quality not unlike the one experienced in traditional *sukiya*-style architecture. Indeed, Kuma is among those architects in Japan who are capable of successfully blending the best of their long-standing Japanese aesthetic sensibilities with those engendered by contemporary life experiences and the latest high technologies. His use of slats, for example, is reminiscent of wooden latticework (*kooshi*) and bamboo mesh and curtain (*sudare*), which are common traditional Japanese devices that mediate between inside and outside while providing privacy (fig. 26).

The translucent sliding panel (*shoji* or *fusuma*) is another traditional element that reappears in contemporary interpretation in many of Kuma's designs. Among these are the Museum of Ando Hiroshige, where translucent paper surfaces are applied together with thin reinforcing acrylic panels, and the Nasu History Museum, where metal frames and mesh provide the basic structure for diaphanous straw-in-plaster panels. Both surfaces modulate light and, in the case of the latter, provide outside views as they are filtered through the gauzy, semi-transparent panels.

Although the Japanese mood of lightness and ephemerality is manifested in most of Kuma's projects in one way or another, in some of his designs the allusion to traditional architecture is more pronounced. Two of his projects in particular refer directly to historic models: the Noh Stage in the Forest and the Takayanagi Community Center are modified versions of the traditional Noh theater and the country farmhouse (*minka*), respectively. In both cases, however, traditional materials such as wood, thatch, and locally produced rice paper are used together with new ones: concrete, asphalt, steel, glass, acrylic sheets, Styrofoam, and copper rods. That such eclectic appropriation of materials is an integral part of Kuma's mode of design is also evident in his Bamboo House in Kanagawa Prefecture (1999), where he filled large bamboo posts with steel-reinforced concrete for structural strength. A "dishonesty" such as this would have been taboo for hardcore modernist architects. In a similar manner the wooden frame structure in the community center is designed with a system of thin tension cables as diagonal braces for stability, a solution that Kuma first applied in his notable Yusuhara Visitors' Center (fig. 27). As these and other examples show, Kuma is neither a modernist nor a traditionalist architect, although he does not hesitate to learn, or even borrow, from previous architectures.

If Kuma was set to challenge traditions while engaging them in these projects, he carried this concept even further in his designs for two small Japanese bathhouses. His Ginzan Onsen Hot Spring Bath House in Yamagata Prefecture (2001) and his more recent Horai Onsen Bath House in Atami (2003) are modern interpretations of the Japanese open-air hot spring bath (*rotemburo*). The Ginzan bathhouse is a small two-story building that is visually exposed to the surrounding resort village; the bathing space can be screened only partially with a sliding translucent panel in conjunction with movable wooden louvers, which form part of a system of slats that make up the main elevation of the wedge-shaped structure.[35]

The bath in Atami, on the other hand, located on the narrow ledge of a steep wooded hillside with great views of the sea, is completely open. It is defined merely by its wooden deck with a pool and a translucent corrugated polycarbonate canopy. This design, more than any other by Kuma, realizes the notion of immaterial architecture; it is hardly a structure at all but rather the mere expression of the tranquil ritual of bathing, conveying the richness of natural phenomena and a profound sense of liberating lightness within the sublime ephemerality of the surrounding unbounded environment (fig. 28). Both bathhouses can be listed among Kuma's most remarkable works, along with the Water/Glass, the River/Filter, the Noh Stage in the Forest, the Museum of Ando Hiroshige, the Nasu History Museum, the Stone Museum, and the Great (Bamboo) Wall Guest House.

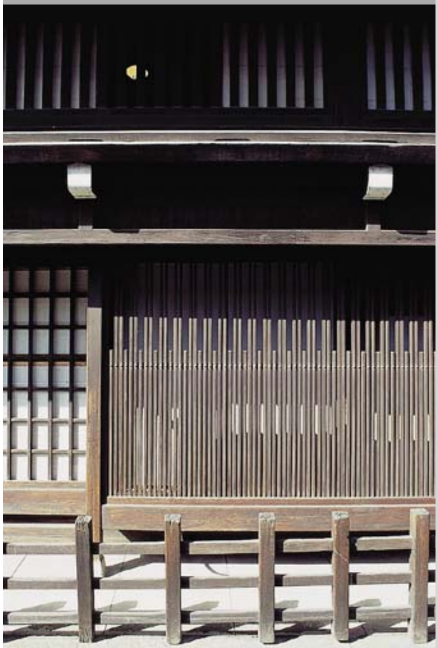

FIG 26.
YOSHIJIMA HOUSE, ELEVATION DETAIL, TAKAYAMA, NINTEENTH CENTURY

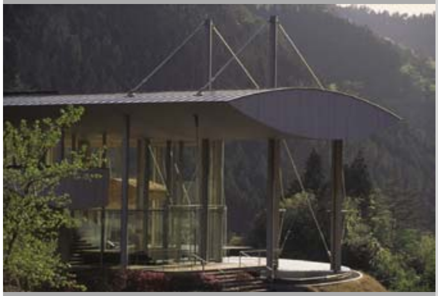

FIG 27.
YUSUHARA VISITORS' CENTER, KENGO KUMA, KOCHI PREFECTURE, 1994

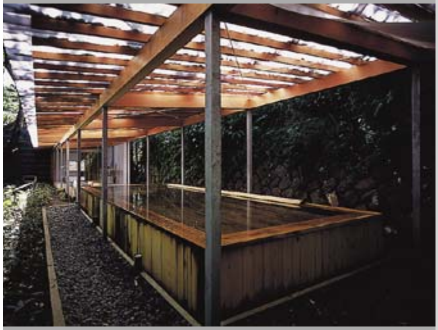

FIG 28.
HORAI ONSEN BATH HOUSE, KENGO KUMA, ATAMI, 2003

TOPOS—DIGITAL GARDENING

As we have seen, Kuma pays considerable attention to the articulation of boundaries and partitions in his buildings in order to render his architecture more fluid, elusive, and less objectlike. Another method of achieving these qualities is his emphasis on horizontal planes and surfaces. For Kuma, the floor and the canopy or roof are the primary place-defining devices; the Horai Onsen Bath House, for instance, consists of no more than an elevated floor and a canopy above. Kuma prefers the floor because it entices flows of movement, which provide continuity between inside and out. His preoccupation with the floor and the terrain beyond can be traced back to the early Water/Glass guesthouse of 1995. Here too, the upper level of the building is conceived primarily of a floor and a flat roof with extensive overhangs of glass and metal louvers. Defining the boundaries of the floor entirely with floor-to-ceiling clear glass and surrounding it with an extensive pool of water on the roof deck below, Kuma has achieved both visual and tactile continuity between inside and out, between his architecture and the sea, or nature in general.[36] Almost the same articulation characterizes his Noh Stage in the Forest, where not only the stage itself but also the gallery for the audience are configured as a floor and ceiling or roof in their simplest forms; at the gallery, boundaries are made up of sliding glass panels that provide enclosure when necessary (fig. 29).

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[35] In the traditional Japanese public bath, whether it is indoors (*osento*) or outdoors (*rotemburo*), male and female visitors are visually separated as they enter their respective pools naked. As bathing follows hygienic cleansing, the Japanese bath is more therapeutic or meditative in nature and, in the case of the *rotemburo*, the experience is enhanced by the bath's immersion in nature. In the Ginzan project, only the pool for the men is outdoors.

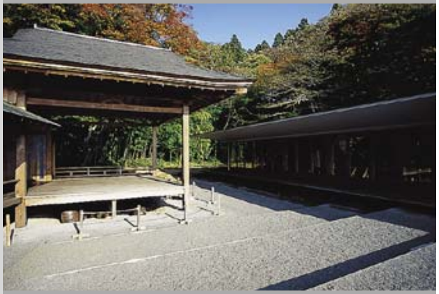

FIG 29.
NOH STAGE IN THE FOREST, COURTYARD, KENGO KUMA, TOYOMA, 1996

The same construction principles shaped much of traditional Japanese (*sukiya*-style) architecture. With most of the boundaries, both inside and out, delineated by thin, paper-covered sliding panels (*fusuma* and *shoji*) that were easily removable, the most important constituents of the building were the slightly elevated floor, covered by *tatami* and often extended on the outside as verandas (*engawa*), and the roof, with large overhangs all around. Such spatial disposition guaranteed both flexibility and an intimate but variable interface with the garden and nature. The transition between architectural space and the garden was also modulated by the differentiation in materials and the gradation of horizontal surfaces: *tatami, engawa*, steps, stepping stones, and gravel, among others. Arata Isozaki, discussing the phenomenology of floors in an essay on Japanese vernacular architecture, writes that such subtle differentiation "establishes zones without creating a serious physical spatial barrier....The use of symbolic markers instead of physical walls or ramparts to delineate space reflects a characteristically Japanese understanding of space."[37]

Kuma undoubtedly uses horizontal planes—particularly the floor—in the same way in many of his designs. His Space Design of the Venice Biennale Japanese Pavilion (1995); the Forest/Floor, a small house in Karuizawa; and the Soba Restaurant at Togakushi Shrine (both 2003) are additional examples. In Venice, Kuma was responsible for the interior design of an existing pavilion that had been designed by Takamasa Yoshizaka in 1955. As the theme of the Japanese exhibition was the *suki*-sense—an atmosphere of restrained elegance and sophistication—of multi-vernacular, Kuma converted the small space into a Japanese stroll garden (*kaiyushiki-niwa*) complete with a shallow pool of water over which he arranged wooden decks and walkways that extended to the wooded area around the pavilion. Inspired by traditional garden design principles, the spatial as well as artistic experience of Kuma's design—as in most of his work—unfolds sequentially and involves all human senses including the kinetic, as one walks on the carefully arranged surfaces. Kuma's spatial choreography ensures again the connection of the inside with the outside, of architecture with nature (fig. 30).

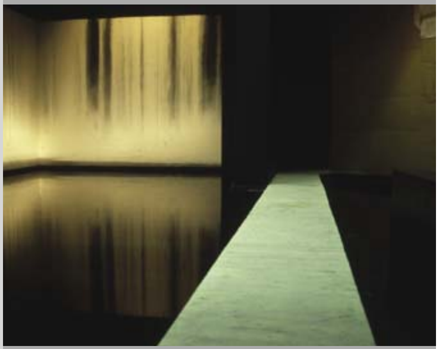

FIG 30.
SPACE DESIGN, VENICE BIENNALE, JAPANESE PAVILION, INTERIOR, KENGO KUMA, VENICE, ITALY 1995

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[36] The roof deck contains an open-air Japanese bath (*rotemburo*) located within the surrounding pool of water. This bath is accessible from the bathroom of one of the guest rooms. Immersed in the water, one can experience a direct or tactile connection to the sea.

[37] Arata Isozaki, "Floors and Internal Spaces in Japanese Vernacular Architecture—Phenomenology of Floors," *RES* 11 (Spring 1986): 54.

Both the Forest/Floor and Soba Restaurant, on the other hand, are designed with elevated platforms and thus clearly allude not only to the construction of the typical Japanese house, but also to certain modern architectural prototypes advocated by Le Corbusier.[38] More precisely, the Forest/Floor finds its prototype in Mies van der Rohe's Farnsworth House in Illinois (1950), but manages to deviate from it as much as from the Japanese residential model. It breaks the boxy disposition of Mies's design with large, overhanging roofs and by employing a unique steel structure: the roof, suspended from above, is supported by two major posts that are buried in cabinets. Kuma thus manages to keep the interior free of posts, emphasizing the role of the floor and its visual connection to the wooded area outside. In addition, the almost empty space of the pilotis underneath the building ensures the continuity of the land, which here becomes another floor surface.

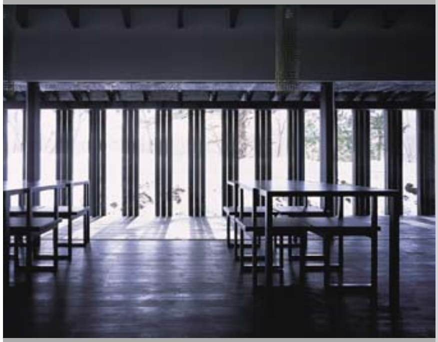

FIG 31.
SOBA RESTAURANT AT TOGAKUSHI SHRINE, INTERIOR DETAIL, KENGO KUMA, TOGAKUSHI, NAGANO PREFECTURE, 2003

The Soba Restaurant features once again an unusual structural frame, with its combination of steel and wooden elements and its system of fixed, elongated, and vertically slit panels on the south facade that, alternating with equally narrow openings, provide privacy and protection from the sun while offering views. The repetitive arrangement of these panels, similar to those at the Takayanagi Community Center, results in an attractive, semi-permeable surface, while lending a rhythmic texture to the building (fig. 31).

Kuma's focus on horizontal surfaces and his continued striving for establishing seamless connections with the environment at large have led him to expand his vision of erasing architecture to even larger territories. In many of his projects he proposes a new landscape, which is almost without exception related to the idea of gardening. Kuma's preoccupation with gardening brings us back to his initial intention to eliminate external viewpoints, or the exteriority of architecture, and to create work that is part of a fluid continuum. Challenging the predominantly visual attributes of landscapes that both the designer and the spectator look at from an outside vantage point, Kuma intends to engender an environment as a garden, where everyone is a gardener. As he explains, "the 'gardener' is always inside the garden. He is 'inside' in a different sense from the visitor imagined by Le Corbusier, who moves about, cutting out images in a building. . . . [In the case of a garden] there is no distance between the [gardener] and the garden. The subject and object are joined and continuous."[39]

If this is the case, the study of architecture as parts-to-the-whole and the resulting hierarchies—the fundamental understanding and approach of modern architecture—

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[38] In his "Five Points of a New Architecture" (*Les 5 Points d'une Architecture nouvelle*), first published in 1926, Le Corbusier listed the application of pilotis as the first point. This solution, based on the separation of the load-bearing structural skeleton and the outside or inside walls, liberated the ground from the building. He further advocated a flat roof with roof terrace, a free plan, large and continuous windows, and a flexible or an independent articulation of facades. One of the best built examples of these principles by Le Corbusier is the Villa Savoy in Garches of 1931, near Paris. Many representatives of modern architecture adapted these principles in their works; they became the general attributes of modernism.

[39] Kuma, "Digital Gardening," 8.

are also bound to lose their meanings. The new vision, shared by other Japanese architects (including Toyo Ito, among others) proposes architecture as an environment that, not unlike nature or its representative garden, is continuous yet always in the state of transition caused by both natural events and human interventions.[40] In such designs, spaces, working as an architectural "software," are engendered as almost pure sensations, while architecture as "hardware" remains latent. Beyond the growing number of Kuma's built projects—including the Vertical Garden (2004), an event place primarily for children in Osaka—several unbuilt ones offer variations on the theme of gardening, including the Automatic Garden in Kyoto (1994), the Moving Garden Civic Hall in Nagaoka (1996), the Simple Garden Hotel in Le Landes, France (1997), and the Cubic Garden Museum in Aichi Prefecture (2000).

Just as the surfaces of vertical boundaries of architectural space are used today to display diverse and fluctuating information, Kuma renders his landscape designs as membranes that are stretched over large areas and textured by natural vegetation and built elements (architecture). His method here is similar to the "particlization" of other surfaces as screens, now applied on a different scale. The Eco Particle project of 1997 is a good example. A tapestry of network-like surfaces—parks and architecture in an inseparable symbiosis—is laid out on the terrain of Miyako-jima, a small island in Okinawa Prefecture, in an ecologically effective way (fig. 32). Kuma also explored such ideas in his earlier Grass Net project (1996), a network of parks in a housing district in downtown Tokyo, which he planned as architecture that would be similar to the Internet, which "is shapeless yet ubiquitous."[41]

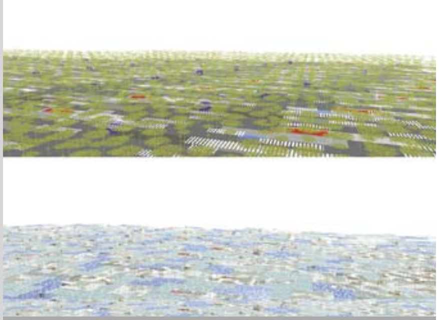

FIG 32.
ECO PARTICLE, PROJECT,
KENGO KUMA, MIYAKO-JIMA,
OKINAWA, 1997

Kuma's intentions are even more pronounced in his 1998 proposal for the 2005 World Exposition in Nagoya, which is dedicated to the subjects of "Nature's Wisdom" and the need for and ways of coexisting with nature. Here, more than in the other two projects, Kuma configured the hilly site as a natural park, in which the typical freestanding pavilion-type architecture and its projected imageries are eclipsed by the topography of the land. The undulating surfaces of the architecture are made continuous with the similarly fluid topos of the natural environment (fig. 33). With the dichotomy of figure and ground thus eliminated, architecture too is erased. In all these projects, "rather than understanding the landscape as a picturesque collection of monuments or points, Kuma moves toward a more topological concept of landscapes of textured, undulating surfaces," as Greg Lynn observed.[42] In the same project, Kuma also proposed STHMDs (See-Through Head-Mounted Displays), which allow the simultaneous viewing of the real forest outside and its various digital images in and through the same animated yet transparent membrane.

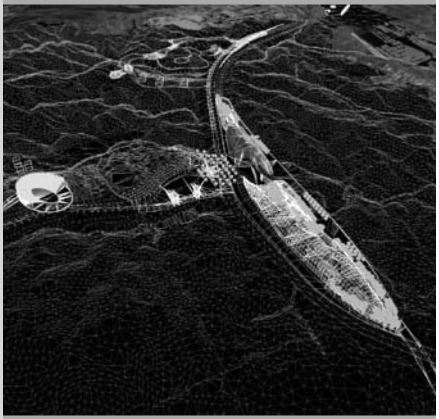

FIG 33.
2005 WORLD EXPOSITION,
MASTER PLAN, KENGO KUMA,
AICHI PREFECTURE, 1998

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[40] In his essay "Dividing versus Making," Ito explains that "The basic principle of modern architecture is to divide a whole into elements and to organize those elements according to some rule. This is similar to the methods of modern science, which is to try to analyze and reduce things to elements and explain everything mechanistically in terms of the relationships of those elements." And, discussing his design for the Mediatheque, he lists his "desire not to create joints...beams...walls... rooms...[and] architecture." Toyo Ito, *Sendai Mediatheque, Miyagi, Japan, 1995–2000* (Tokyo: ADA Edita, 2000), 7.

[41] Kengo Kuma, "Grass Net," *Space Design* 11 (1997): 100.

[42] Lynn, "Pointillism," 47.

The design of extensive surfaces of the architectural landscape also necessitated the advanced use of computers. Relying on computer-aided design more extensively, Kuma has been proposing similar schemes for other large-scale projects such as his recent competition entries to the Osaka City Downtown Redevelopment and the Tianjin Urban Project in China (both 2004). In these designs he devised large, softly shaped multistory protrusions from the ground as built structures that, like a mountainous terrain, are covered with green vegetation outside while lit and ventilated through various screens inside. Likewise, his proposal for the Great Egyptian Museum project (2004), not far from the Gaza Pyramids, is a huge inflated amorphous bubble, which looks almost as if the ground itself has swelled. Under the lightweight and translucent/transparent membrane of this dome, the thematic displays are flexibly arranged on the undulating green surface of the ground, whereas the spaces for temporary exhibitions, the restaurant, and the conference hall are shaped as "floating eggs" within the larger space of the dome.

An important further development of Kuma's architecture-as-topos idea is another project, the Nam June Paik Museum in Kyonggi, South Korea (2004), dedicated to the work of the internationally renowned multimedia artist. Located in a shallow, wooded valley, the horizontally stretching, one-level museum features the sloping and undulating terrain as its floor—an indoor garden, as it were. This garden is then covered by two special flat glass roofs that are each flooded with a .06-inch (1.5 mm) thin sheet of flowing water. Cascading from the lower edges of these translucent/transparent roof planes, water wraps around the entire space. In addition the glass roof underneath is divided into small cells in a grid pattern, most of which feature a television monitor facing upward, displaying their active screens through the glass and water. As visitors walk on top of these television monitor roofs, they can observe the broadcast as well as natural phenomena as they are reflected on the surface of the water. The boundaries between the real and the virtual are thus blurred, while the cumulative display of the monitors themselves, when observed from above, appears as a large and active pixilated surface (fig. 34). This project best approximates what Kuma has called "digital gardening," which he described as follows:

> Our immediate task is to adapt the pastoral and craftsmanly techniques of gardening to [a] complex and difficult world. Electronic technology made the discontinuous world continuous, but I believe that by the same token the approach embodied in gardening can be expanded with the help of electronic technology and eliminate that wildly hypertrophied and deformed presence called architecture.[43]

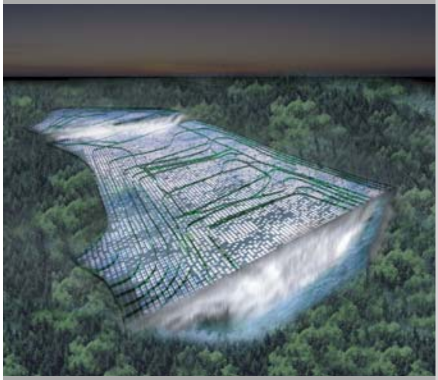

FIG 34.
NAM JUNE PAIK MUSEUM, KENGO KUMA, KYONGGI, SOUTH KOREA, 2004

With this project, Kuma's work has come to full circle—from burying architecture in the ground to digital gardening. And even if the latter is more of a vision than the other modes of Kuma's continued endeavor to erase architecture, it is significant in many ways. He, like most of his contemporaries in Japan, is charting new ways of articulating architecture that by nature can transcend both reductionist modernism and nostalgic

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[43] Kuma, "Digital Gardening," 9.

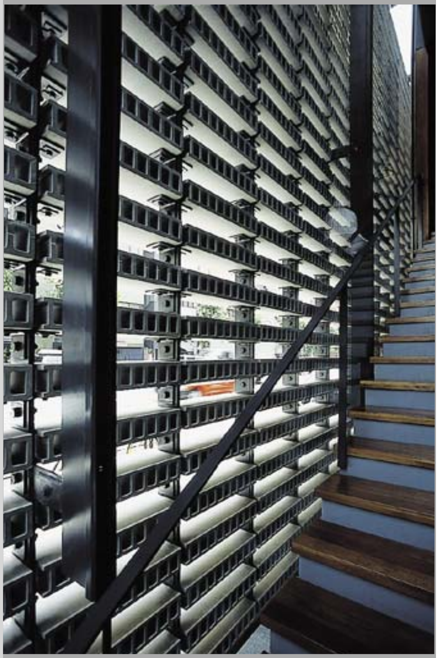


FIG 35.
WAKE TOKUYAMA RESTAURANT, DETAIL OF THE EXTERIOR GLASS WALL WITH CONCRETE BLOCK LOUVERS AND INTERIOR STAIRWAY, KENGO KUMA, TOKYO, 2004

postmodernism, while being better in tune with the environment and the new modes of life fostered by fast developing technologies (figs. 35–36).

Reviewing the rapidly growing list of Kuma's works to date, it is apparent that most of his projects, including his most accomplished ones, are located in natural environments and only rarely in densely built urban areas. His efforts to apply his ideas to urban conditions as well are exemplified by the One Omotesando Building in Tokyo (2003), the Nagasaki Prefectural Museum (now close to completion), and the large Shinonome Apartment Building in Tokyo (both 2004). One might also say that Kuma has yet to build his *opus magnum*, but this might be an unfair statement. In our manifestly non-heroic age, can an architecture of evanescence and ephemerality—an architecture that aspires to be more an illusion than an object, and as such, is destined to disappear—claim to be an *opus magnum* at all? Perhaps not. And yet, having seen Kuma explore so many directions in search of an architecture and environment that is more appropriate for the future, one can surely speculate as to what his next step in our fast-changing times might be. The answer is hard to guess, and may not be known even to him. However, committed as much to modernity as to Japanese culture, Kuma, with the best of his completed as well as unbuilt projects, has already set the expectations truly high. Now he is expected to not only continue meeting these in the years to come, but to exceed them. Kuma is an architect to be watched.

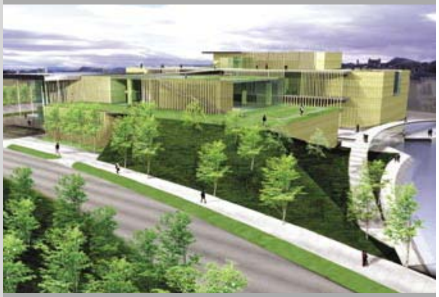
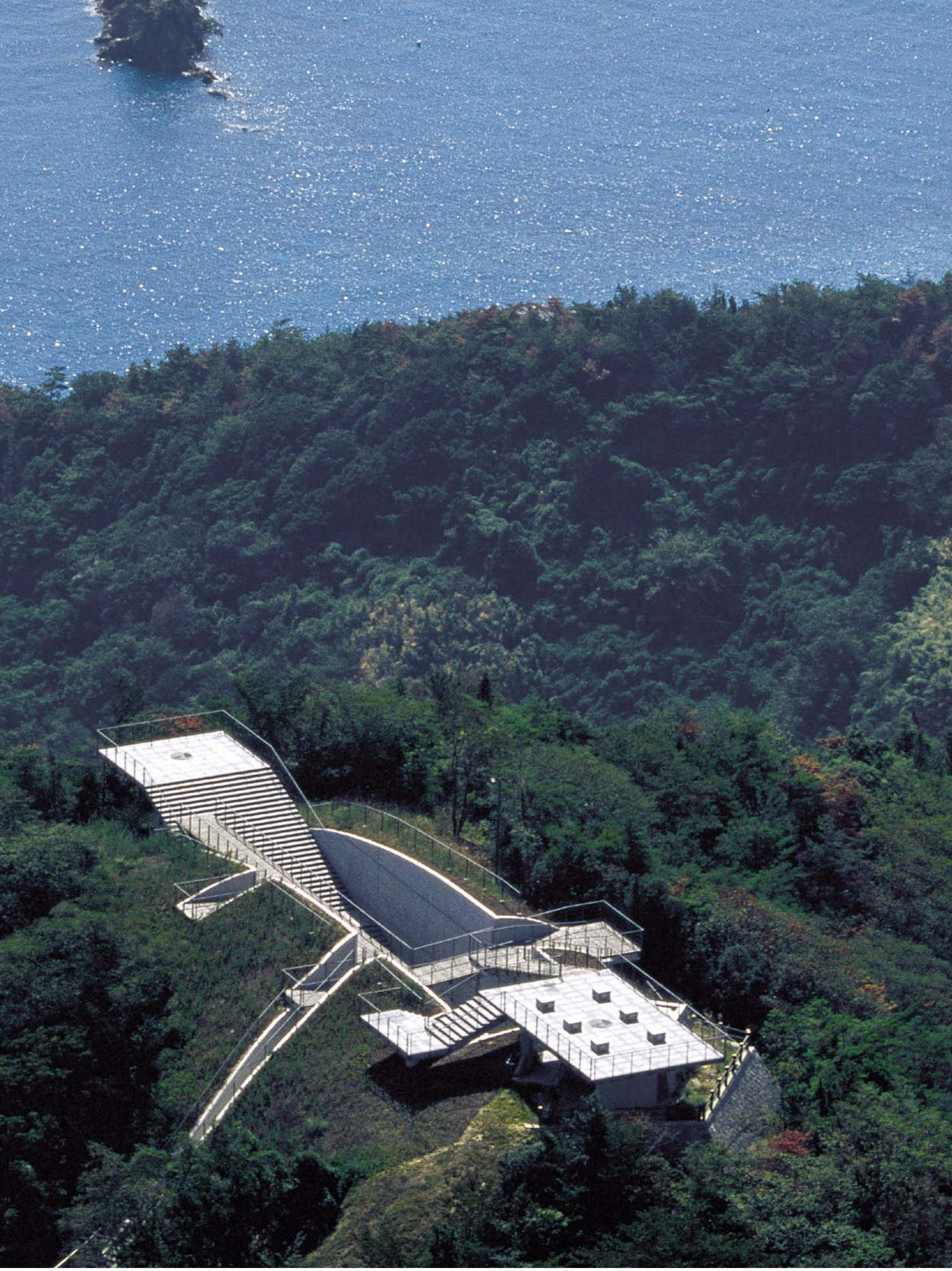
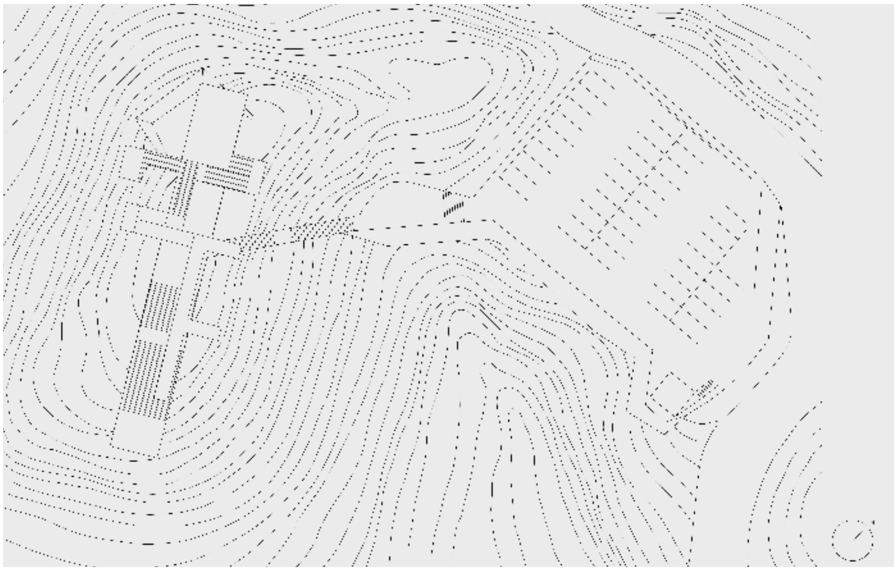


FIG 36.
NAGASAKI PREFECTURAL MUSEUM, KENGO KUMA, TOKYO, 2004

BUILDINGS AND PROJECTS

KIRO-SAN OBSERVATORY, YOSHIUMI, OCHI-GUN, EHIME PREFECTURE, 1994





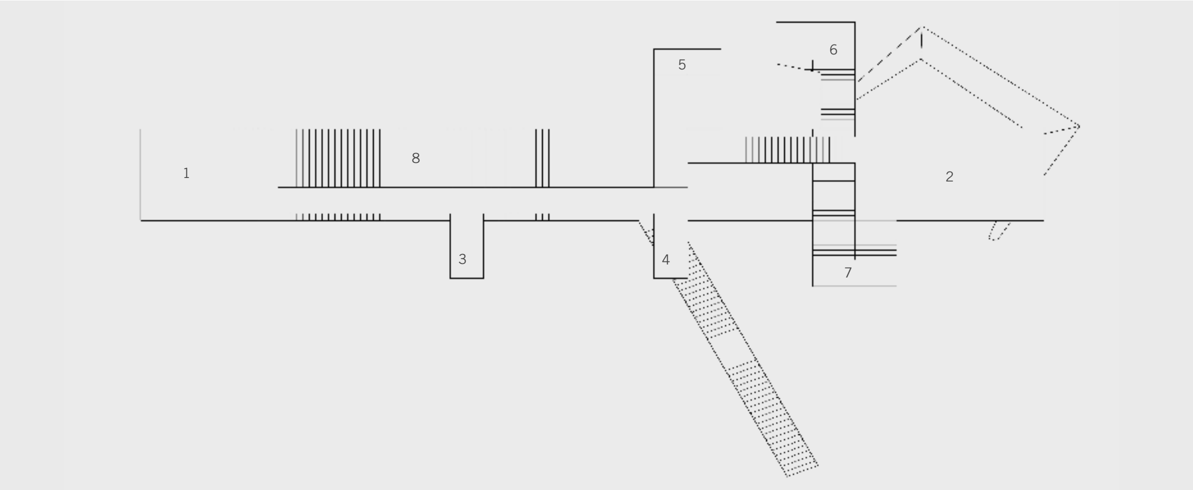
TOP
SITE PLAN

BOTTOM
FLOOR PLAN

OPPOSITE TOP
VIEW FROM DECK A

OPPOSITE MIDDLE
SECTION

OPPOSITE BOTTOM
EAST ELEVATION

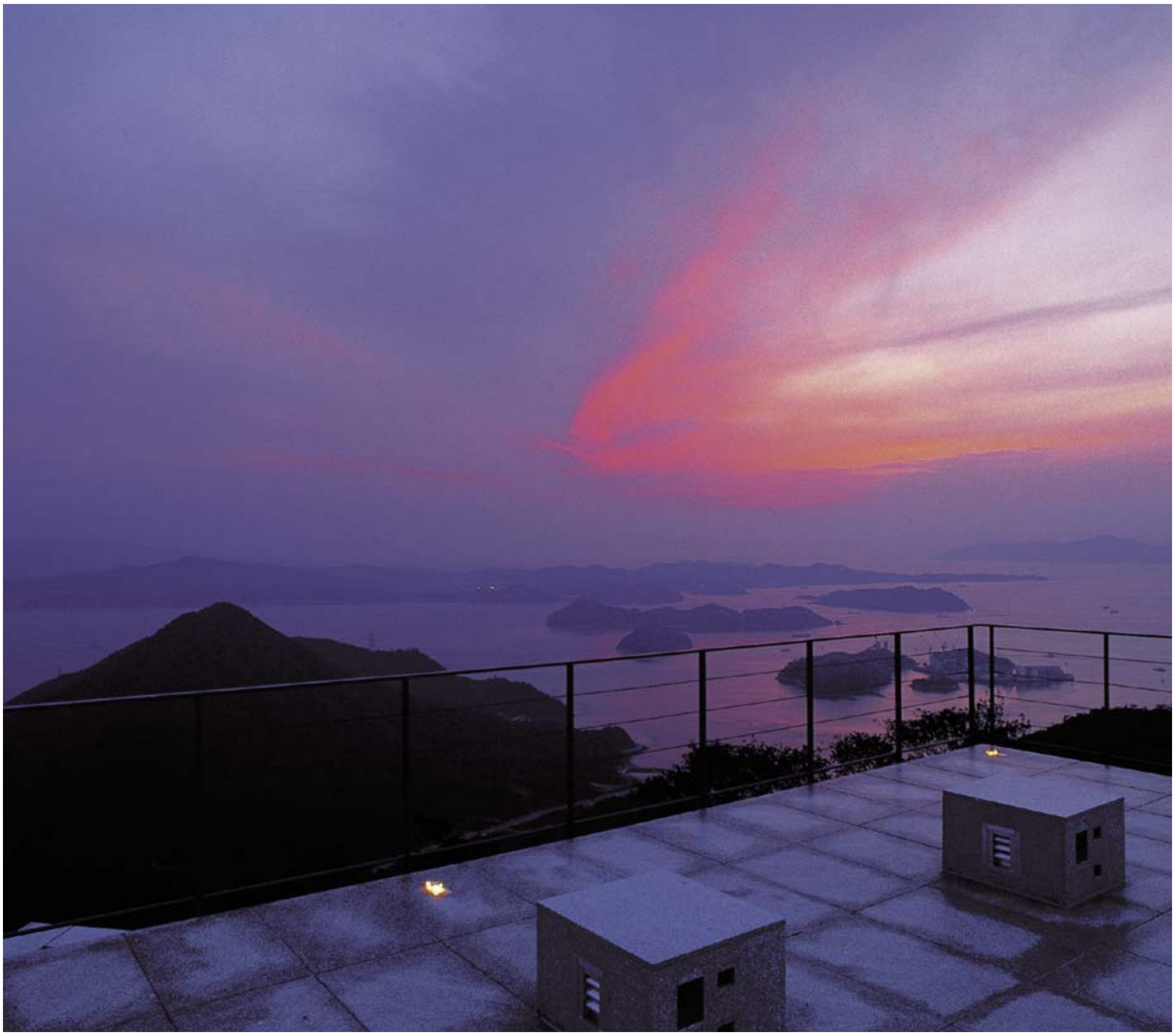


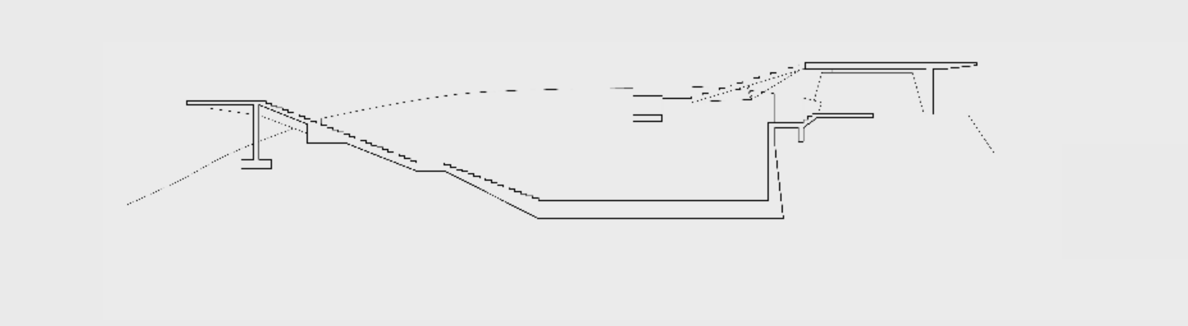
1 / DECK A
2 / DECK B
3 / PLATFORM A
4 / PLATFORM B
5 / PLATFORM C
6 / PLATFORM D
7 / PLATFORM E
8 / OPEN SPACE

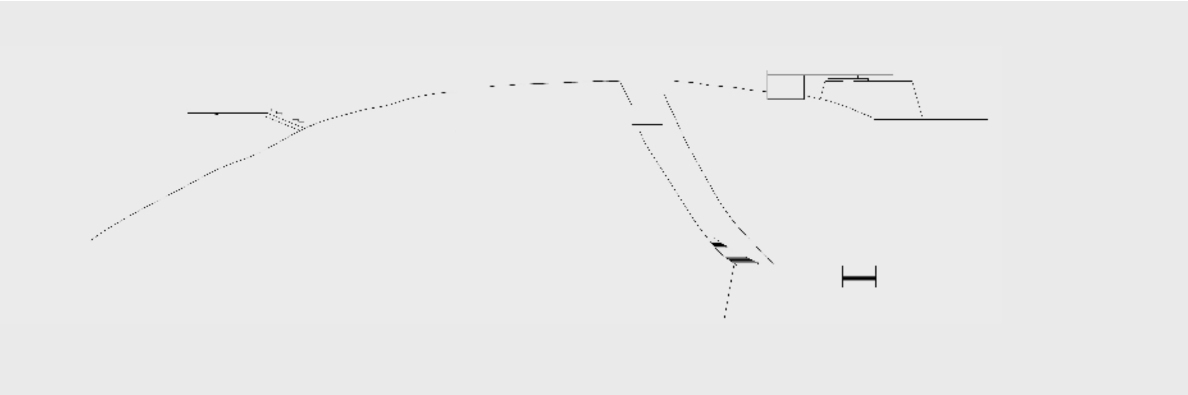
Observation platforms typically stand in the midst of the natural environment, intruding on the beauty of the surrounding scenery. Kuma's design instead focused on the creation of an anti-object in nature. When approached, the Kiro-san Observatory reveals itself only as a single narrow gap in the hillside. To achieve this design, the top of the picturesque Mount Kiro, which had previously been razed to function as an observatory park, was restored to its original form. Then a vertical slit was cut into the ground with two openings at each end, from which small platforms protrude. Visitors are thus provided with a broad panorama of spectacular scenery, with the architecture framing the view of the sea below.

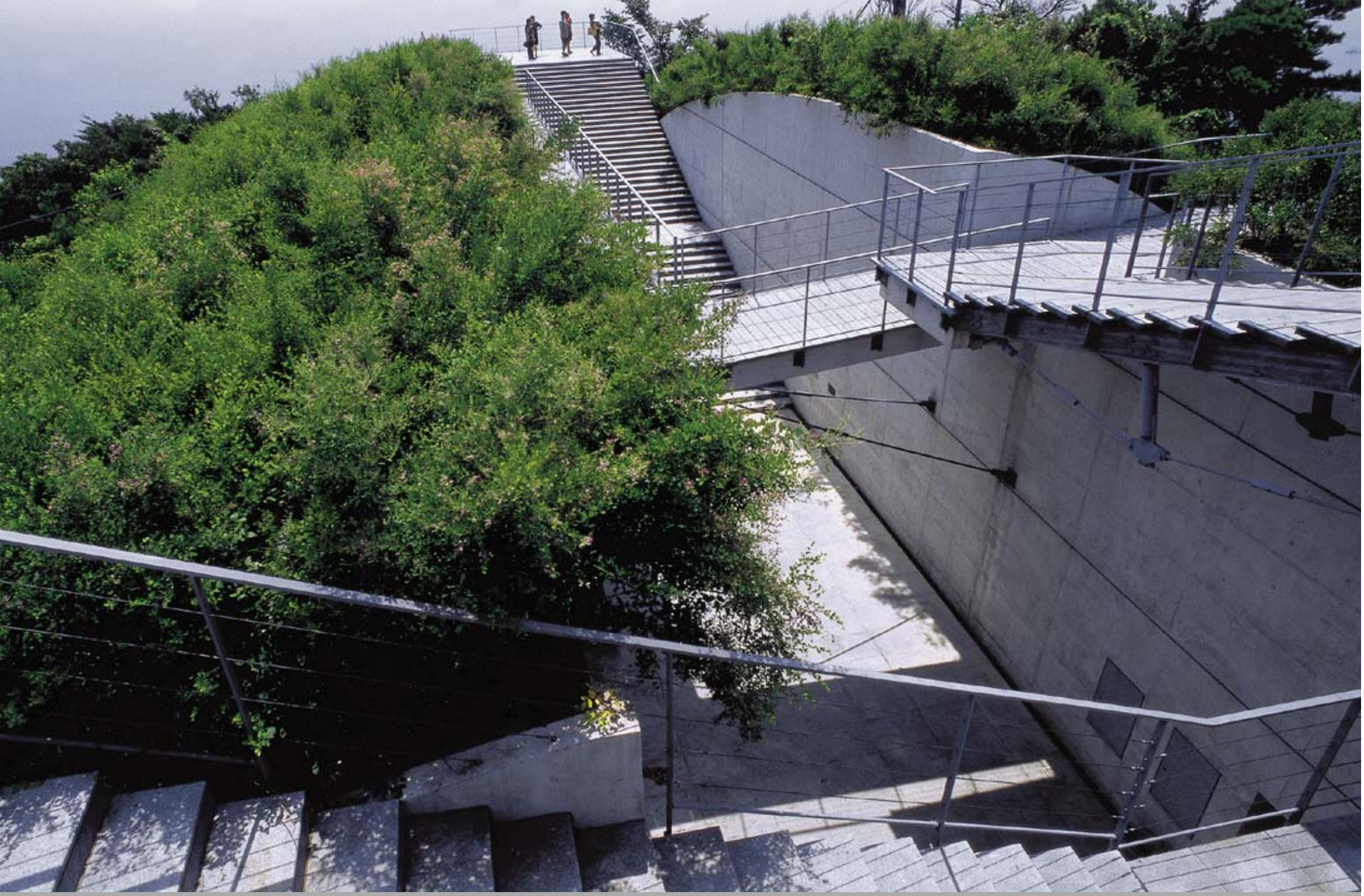
By turning the observatory into a recessed slit, Kuma aimed at reversing the traditional and deep-seated idea of architecture as a protruding object: what was previously seen has now been transformed into the act of seeing. Inside the observatory are video monitors on which visitors find themselves displayed, filmed by a camera in an unknown location. In addition, the observatory takes the form of a stage on which visitors can be observed by others, forcing them to recognize the fact that to see is also to be seen.

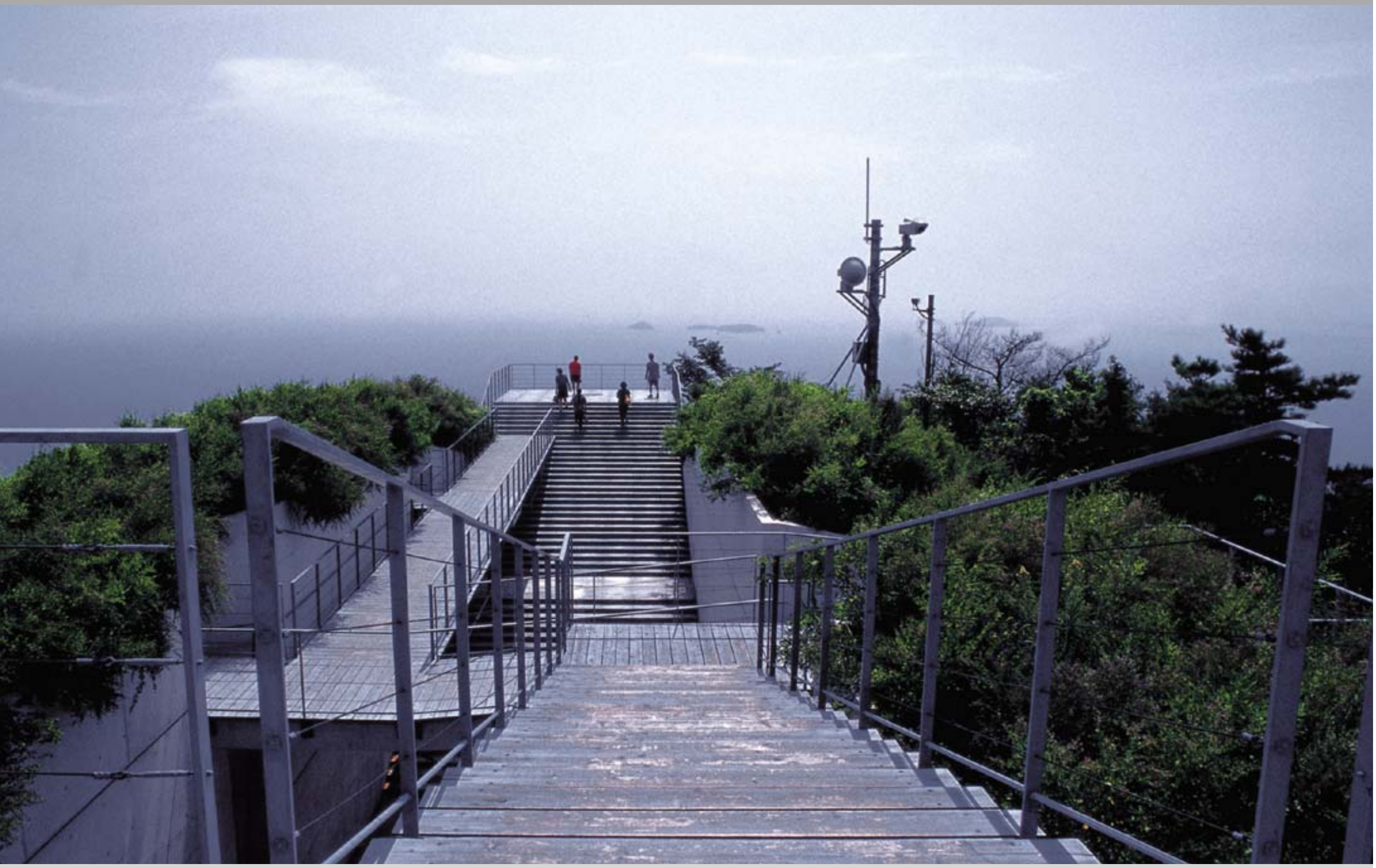
Observation platforms were first built to gain a better knowledge of the world, which could now be viewed from above; they thus conveyed a sense of control. At Kiro-san, the individual, who feels empowered by the experience of viewing, is simultaneously disempowered by the reality of being viewed.



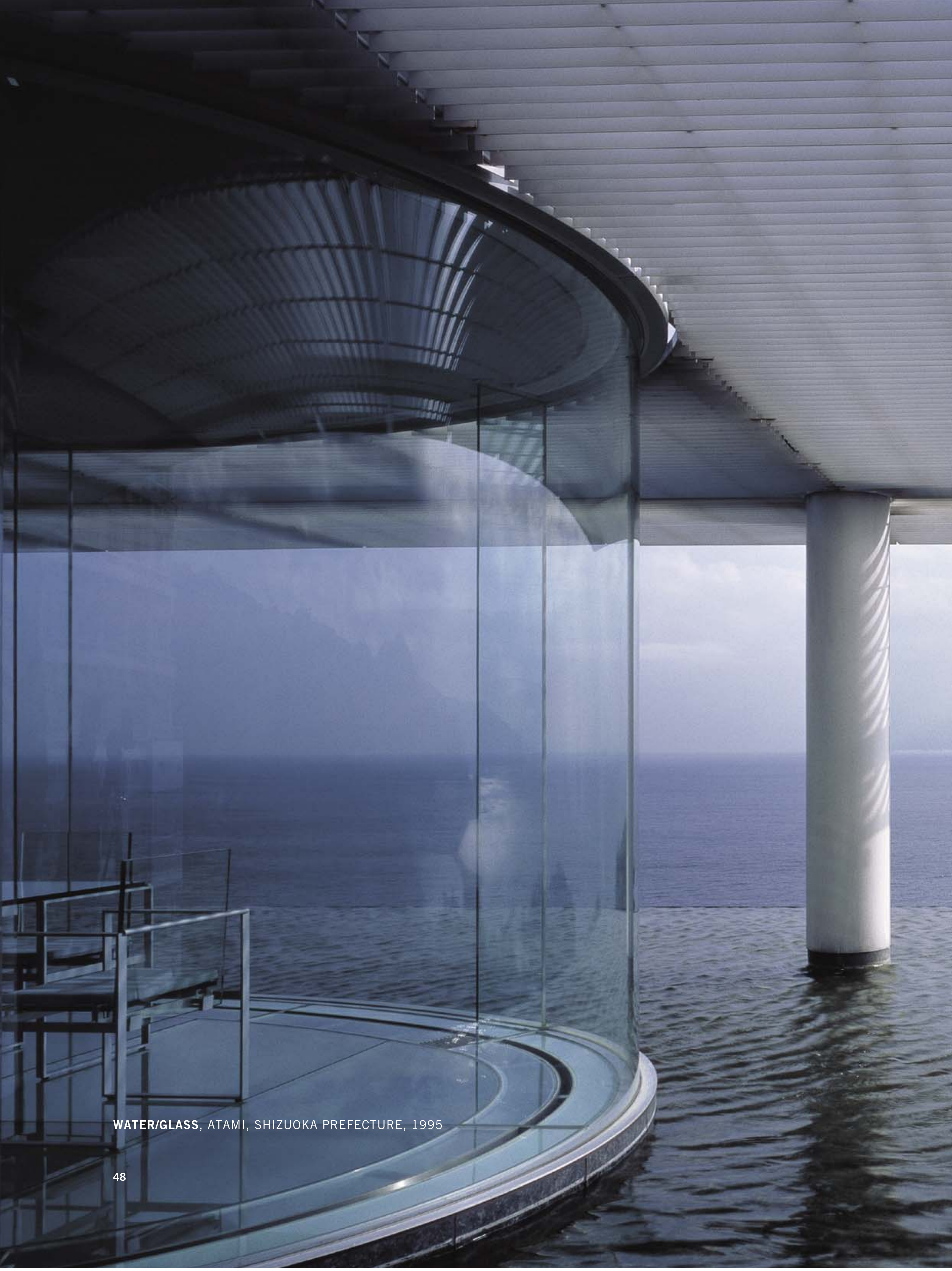




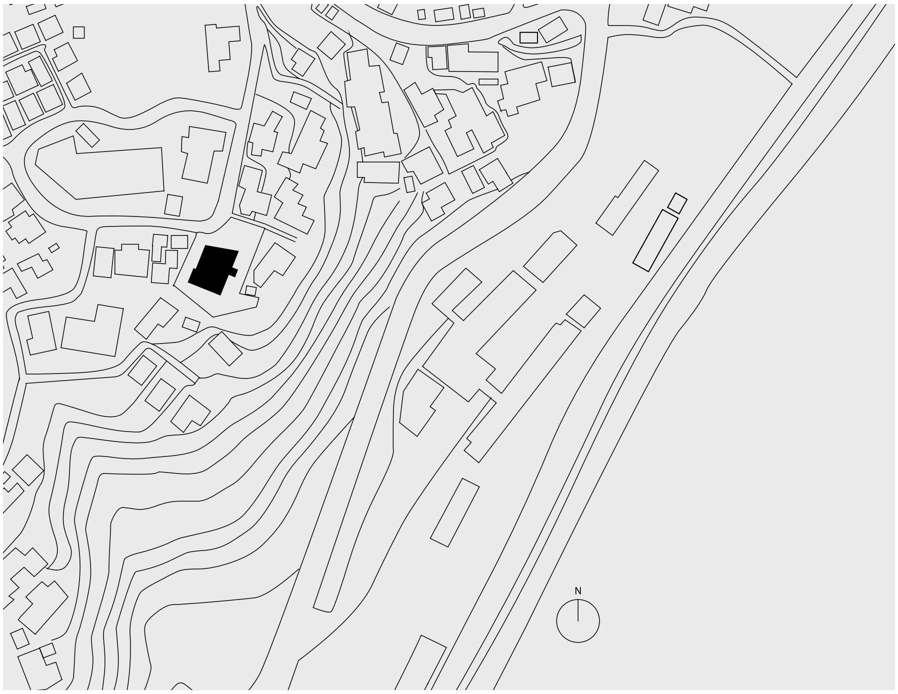




TOP / VIEW OF VERTICAL CUT IN GROUND
BOTTOM / VIEW TO SOUTH FROM DECK B
OPPOSITE / ENTRANCE



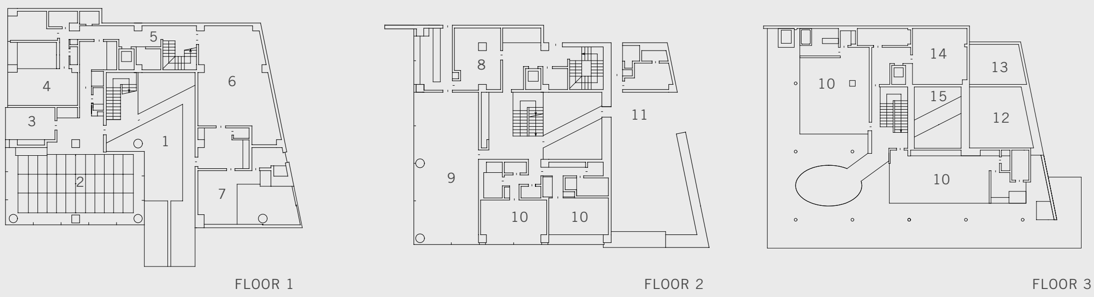
WATER/GLASS, ATAMI, SHIZUOKA PREFECTURE, 1995



TOP
SITE PLAN

BOTTOM
FLOOR PLANS

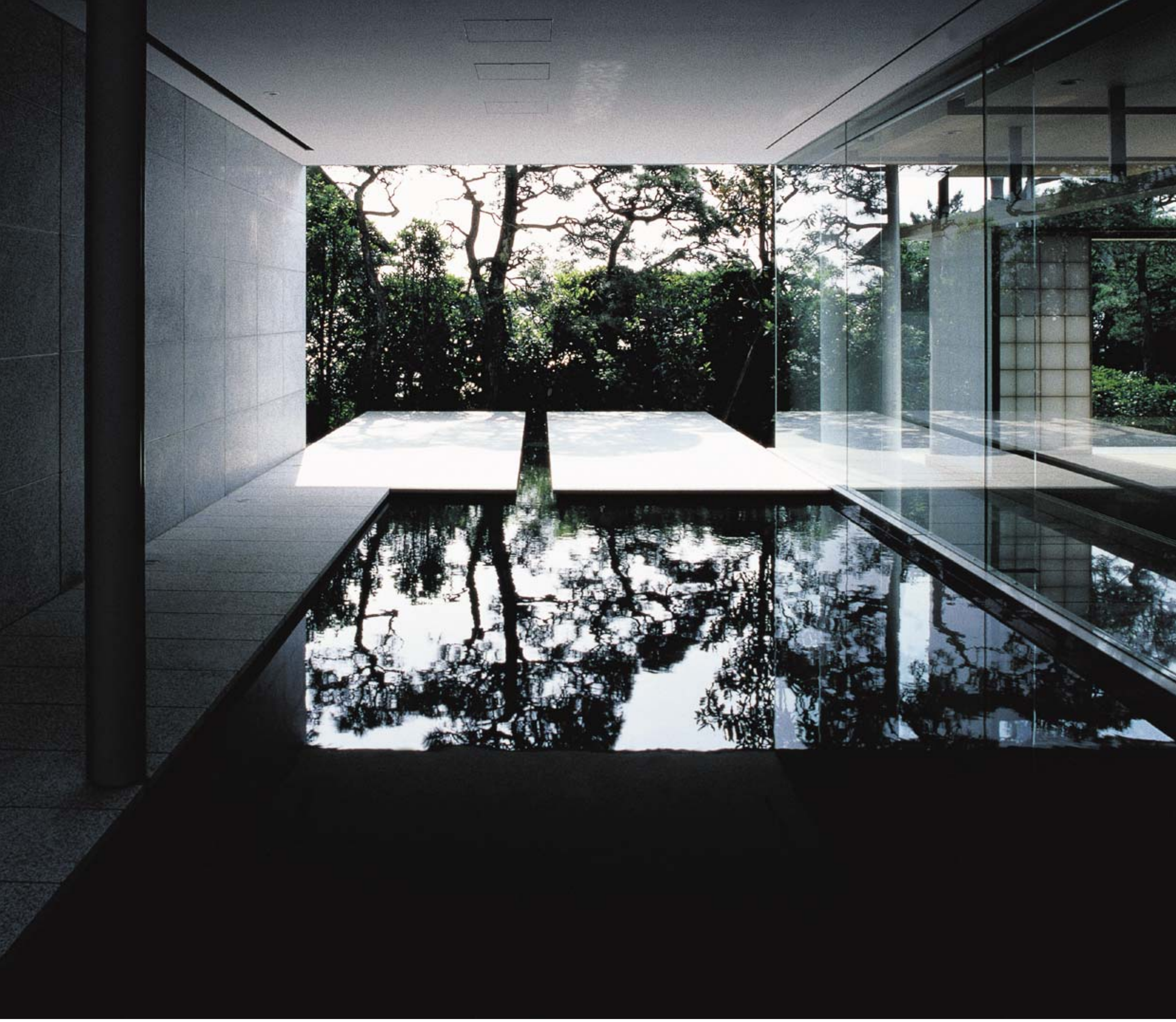
OPPOSITE
FIRST-FLOOR PATIO AND COURTYARD WITH POOL



1 / REFLECTING POOL
2 / TATAMI ROOM
3 / CONFERENCE ROOM
4 / MANAGER'S ROOM
5 / SERVICE YARD
6 / MECHANICAL ROOM
7 / BATH
8 / KITCHEN
9 / LOUNGE
10 / GUEST ROOM
11 / ENTRANCE
12 / HALL
13 / MECHANICAL SPACE
14 / ELECTRICAL ROOM
15 / VOID

The design of this small guesthouse, owned by a large company, was influenced by Kuma's chance encounter with one of the unique results of the German architect Bruno Taut's activities in Japan. Staying in the country from 1933 until 1936, Taut devoted considerable time to studying Japanese architecture. His discovery and great appreciation of the seventeenth-century Katsura Villa in Kyoto is well noted even today. He particularly praised the way the villa frames nature while being practically one with it. Learning from this example, Taut designed a small house, one of two by him in Japan, which is located adjacent to the site of the Water/Glass project. Kuma's visit to Taut's house had a significant influence on formulating his own ideas for the building next door.

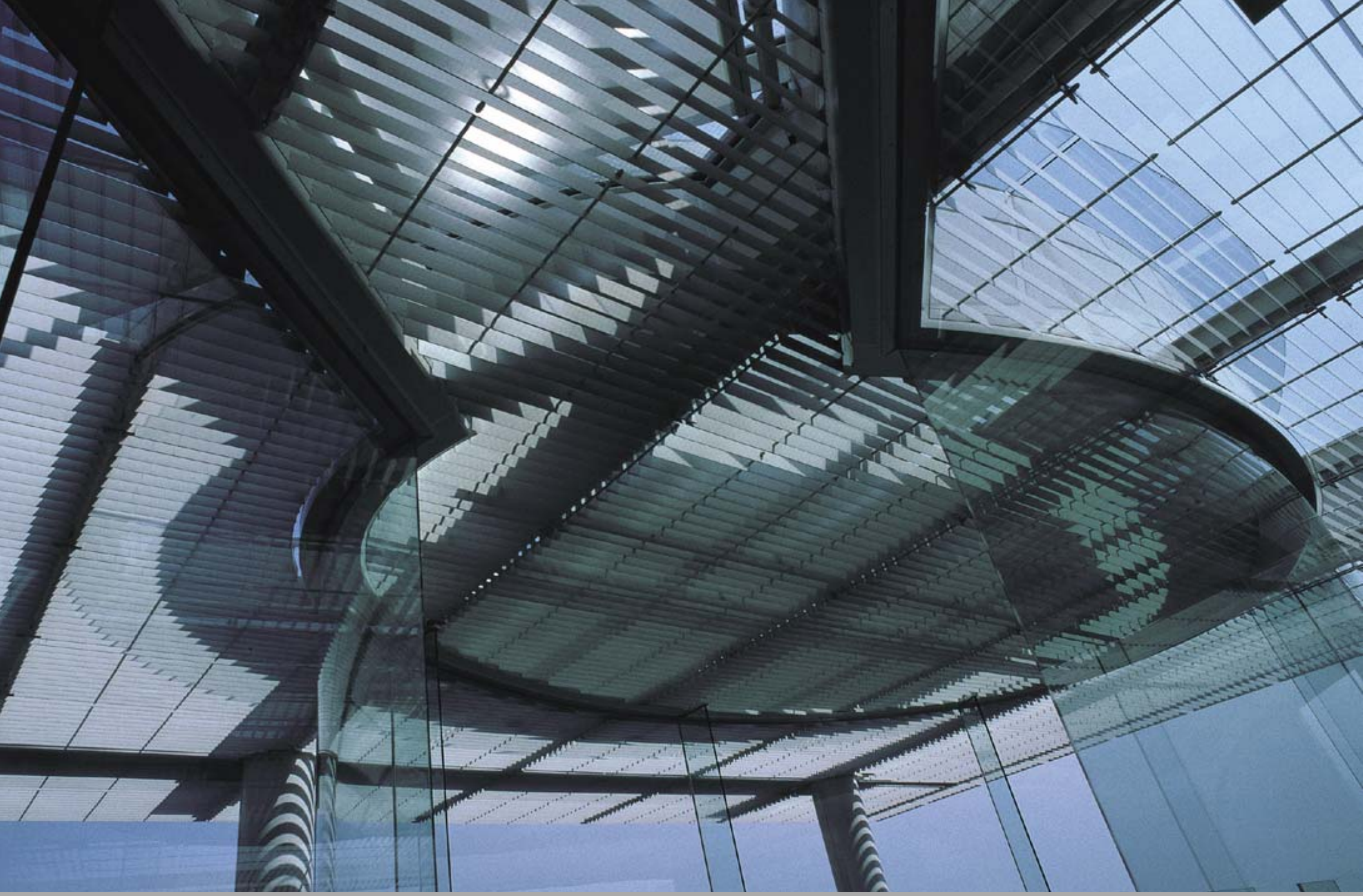
Taut paid specific attention to certain elements of the Katsura Villa that were employed to unify architecture with nature, such as the villa's large overhanging eaves and the extensive bamboo verandas surrounding the structure. Prompted by such precedents conveyed to him through the direct experience of Taut's small house, Kuma's design for the Water/Glass building centers around a shallow pool of water that extends over the perimeter of the third level, similar to the bamboo verandas around Katsura. A system of stainless-steel louvers underneath the upper-level roof act as eaves above the water. As the

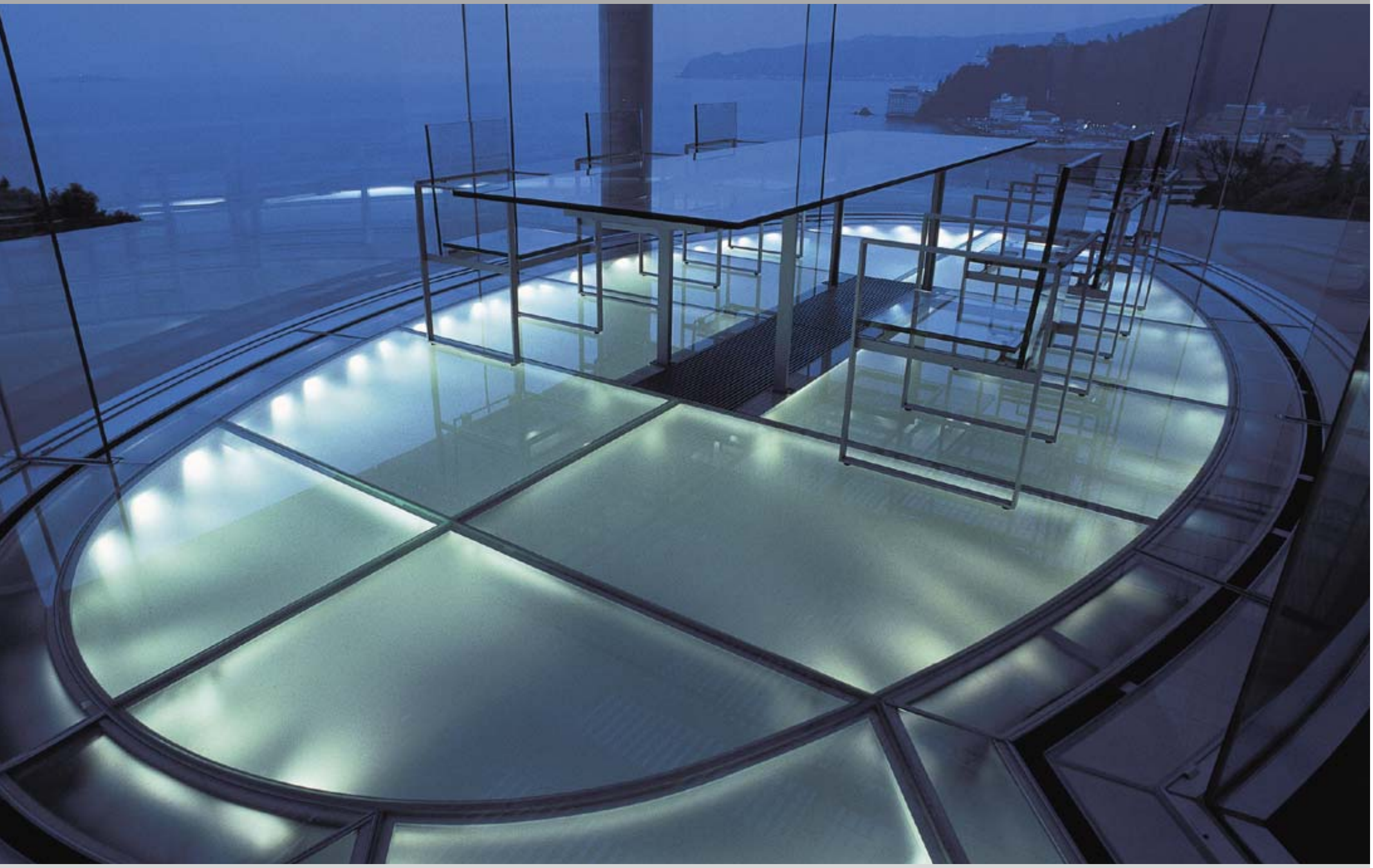


surface of the pool stretches toward the edge of the terrace, it unites visually with the surface of the Pacific Ocean. On top of the pool, a glass box floats, whose various glass membranes as well as those of the all-glass furniture bring about unexpected reflections, further blurring the distinction between inside and out.

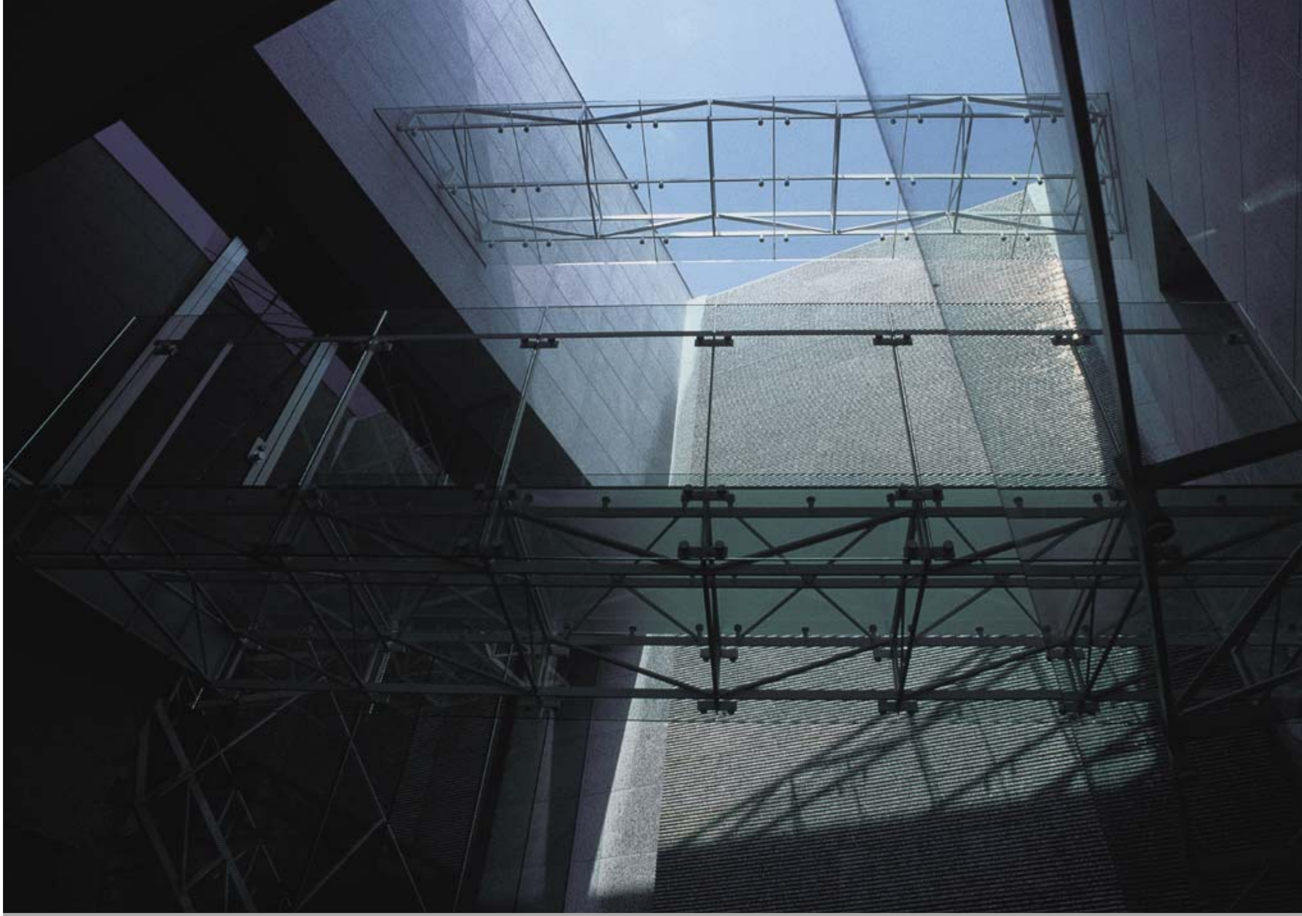
In addition to its spectacular third-floor design, the Water/Glass features several other means of establishing a relationship between architecture and nature. The building integrates an intimate internal courtyard that eventually connects to the landscape outside. To achieve a connection that is not only spatial in nature, Kuma again used glass and water here, generously and impressively. The three-story entrance court is crossed by a glass bridge, while on its walls water cascades down and flows into a shallow pool on the ground level. The pool extends under an open part of the building, which provides access to the garden. The sound of the water as it flows into the pool further emphasizes the soothing power of nature that gives the guesthouse its special character.

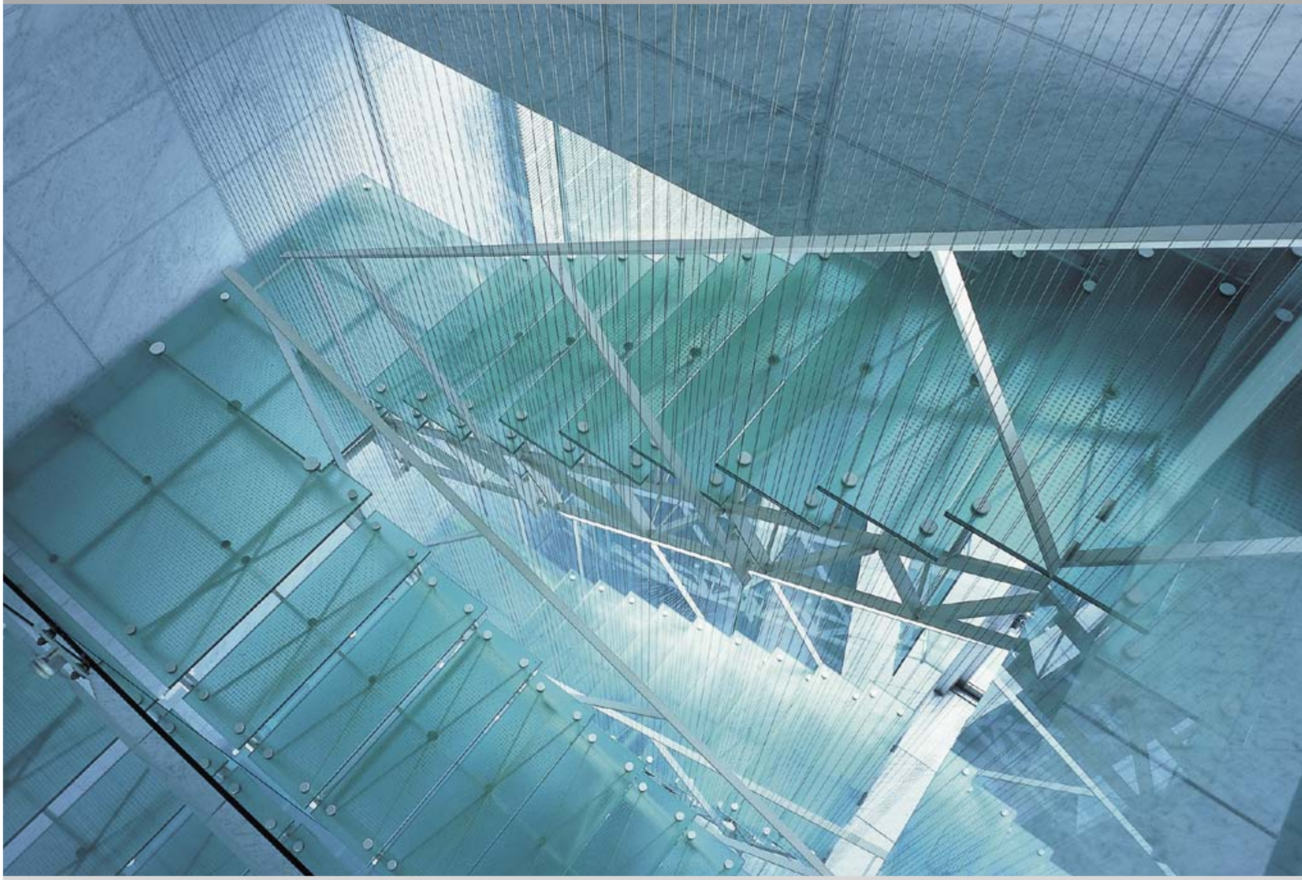
On the interior, the Water/Glass features two large Western-style guest rooms on the top floor and two smaller Japanese-style *tatami* rooms as well as a kitchen and dining/living room on the second floor. The ground level accommodates a large Japanese-style meeting room, a common bath (*ofuro*), and the courtyard.



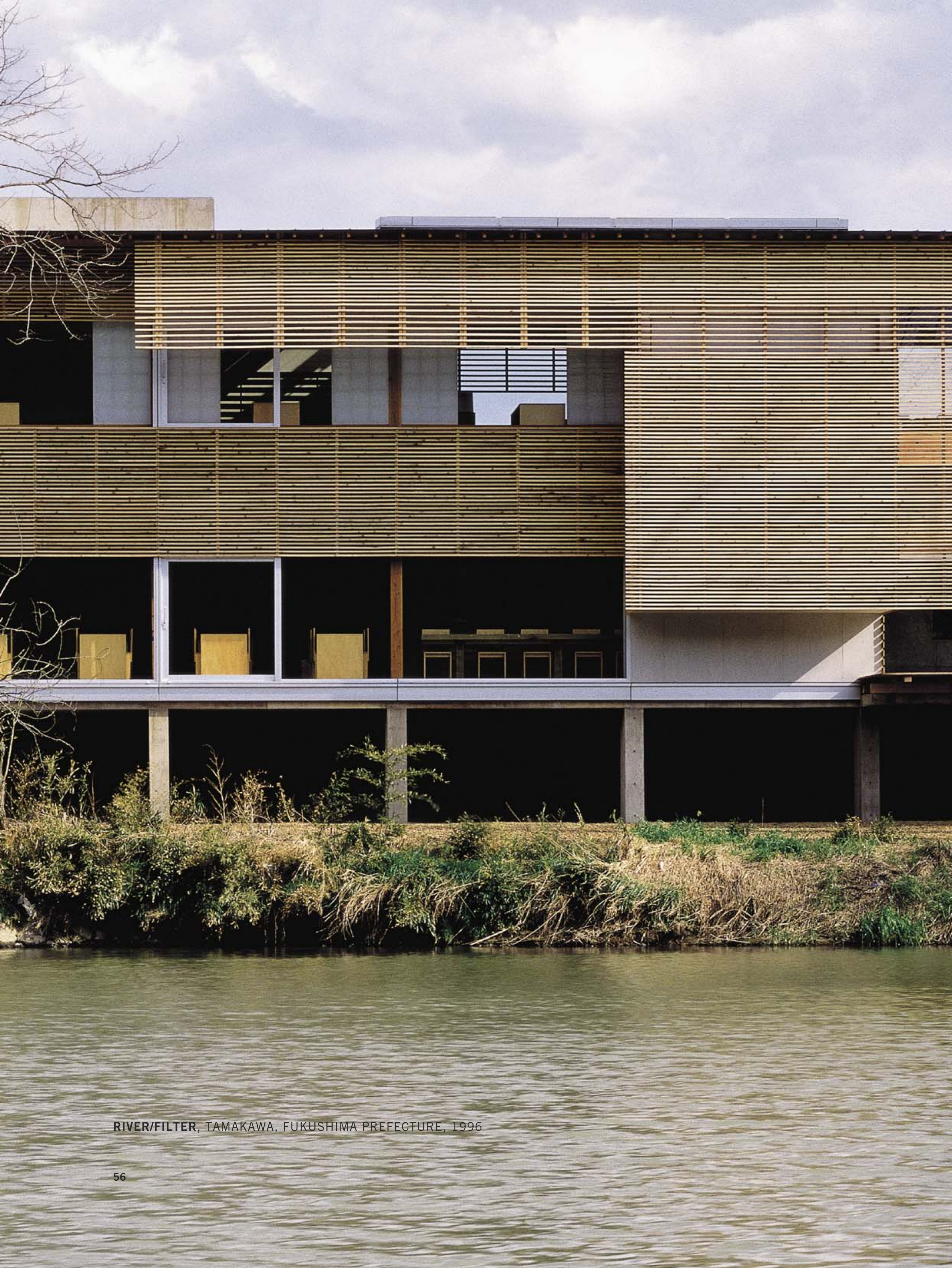


TOP / ROOF OF GLASS LOUNGE
BOTTOM / ILLUMINATED GLASS FLOOR OF LOUNGE
PREVIOUS PAGES / INTERIOR OF GLASS HOUSE

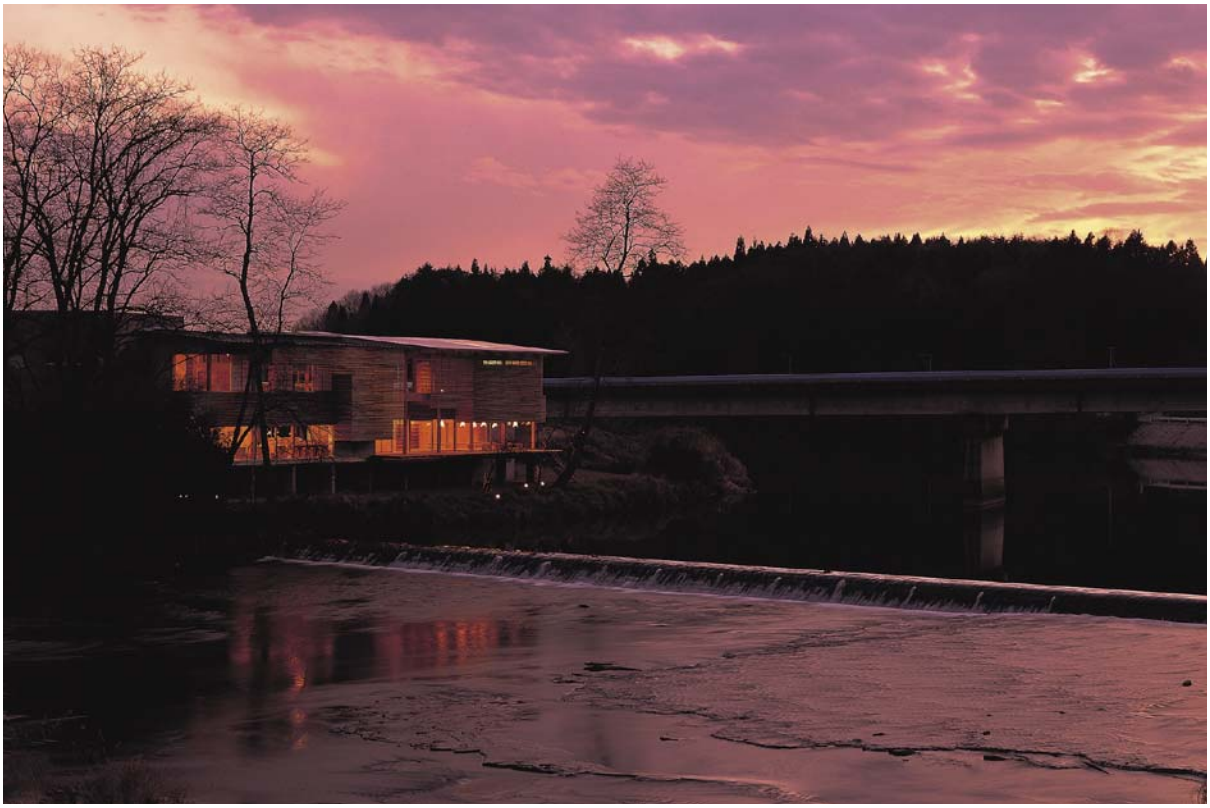


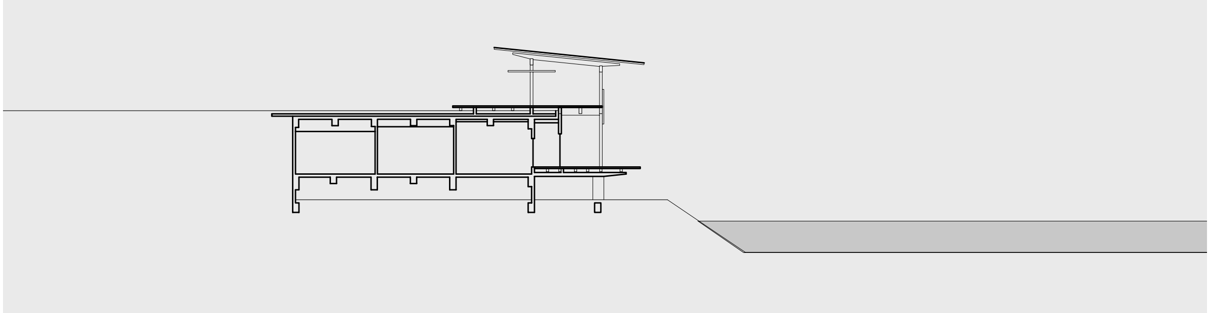


TOP / ENTRANCE COURT WITH GLASS BRIDGE
BOTTOM / DETAIL OF GLASS STAIRWAY



RIVER/FILTER, TAMAKAWA, FUKUSHIMA PREFECTURE, 1996



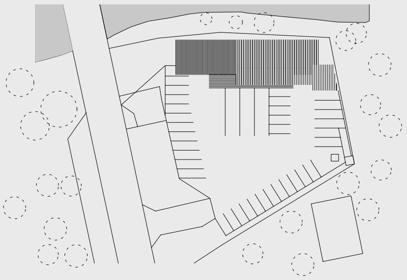


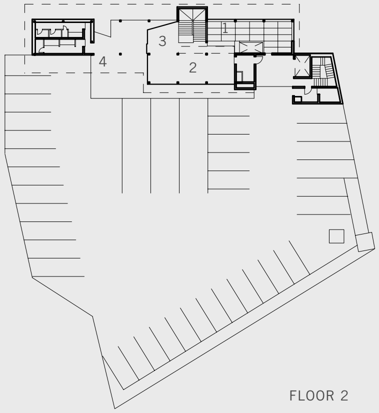
The River/Filter is a traditional Japanese noodle shop and restaurant, located in an environment that is typical for Japanese provinces. One side of the site is bordered by the picturesque scenery of the Abukuma River's Otsujigataki Falls, while the other side faces the busy motorway that connects Fukushima Airport with the city of Suga. Architecture here, standing between the distinct zones of nature and transportation, functions as a mediator between these two conflicting environments. Kuma therefore designed the small, primarily wooden building to act as a finely woven piece of filter rather than a solid mass or object.

A set of four types of wooden slats, each with a different pitch, constitutes the building. The four types are combined, intervened, and superimposed to create a variety of effects. As one moves along the building, it continuously changes in quality depending on one's viewpoint.

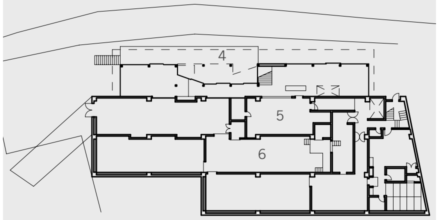
The restaurant is entered on the upper level, where it faces the motorway and appears to be a one-story structure. As the site slopes toward the water, however, the River/Filter actually extends down another level. In addition, a major portion of the building, accommodating the noodle-production facilities and the kitchen, is embedded underground, underneath the parking lot.

The interior, overlooking the shallow stream of water and the hilly wooden landscape beyond, is elegant and airy, alternating with open decks. Altogether, the building—configured as a light and transparent spatial matrix—is designed to filter in the environment.



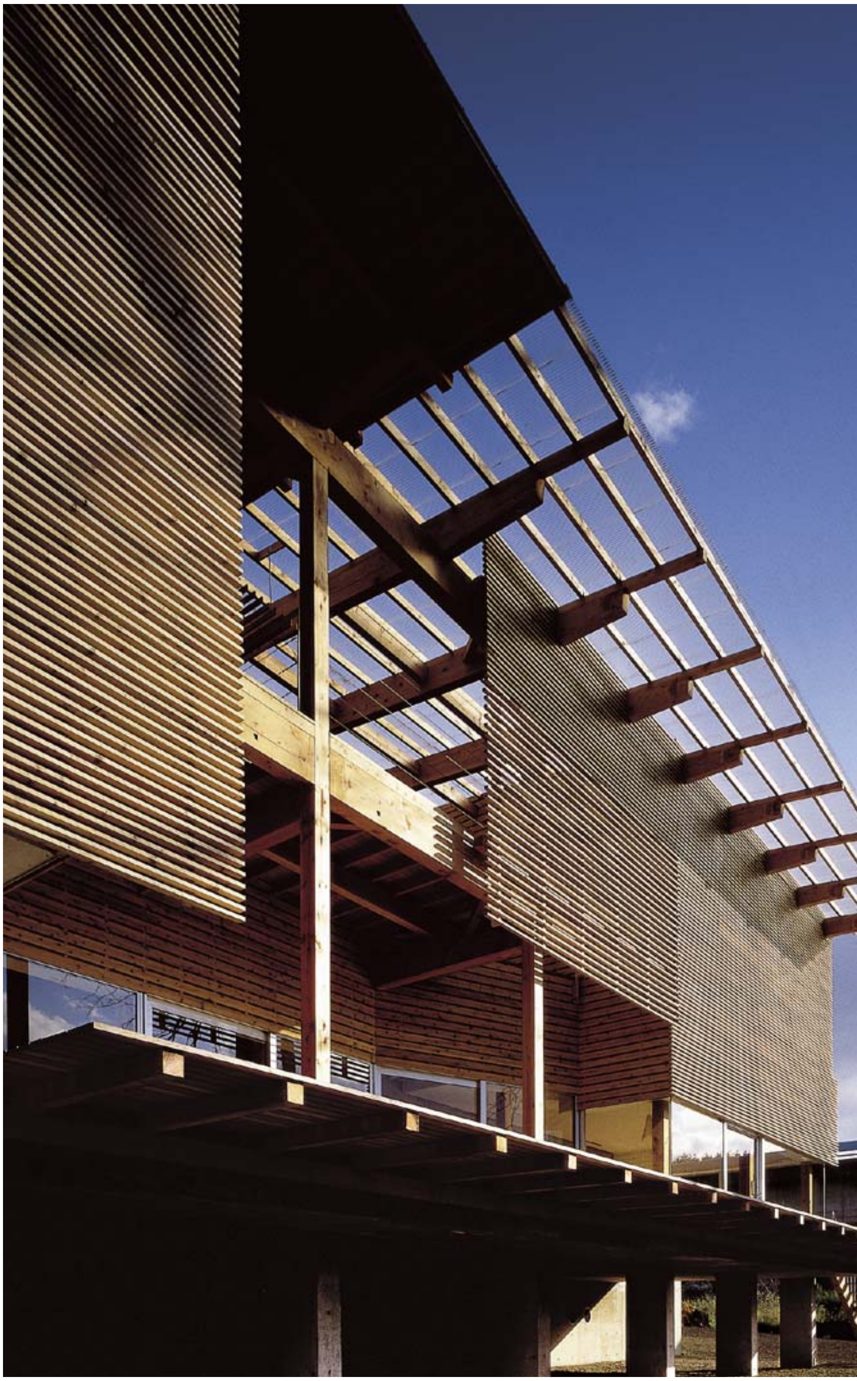


FLOOR 2



FLOOR 1

1 / RESTAURANT
2 / SHOP
3 / LOUNGE
4 / TERRACE
5 / KITCHEN
6 / FACTORY



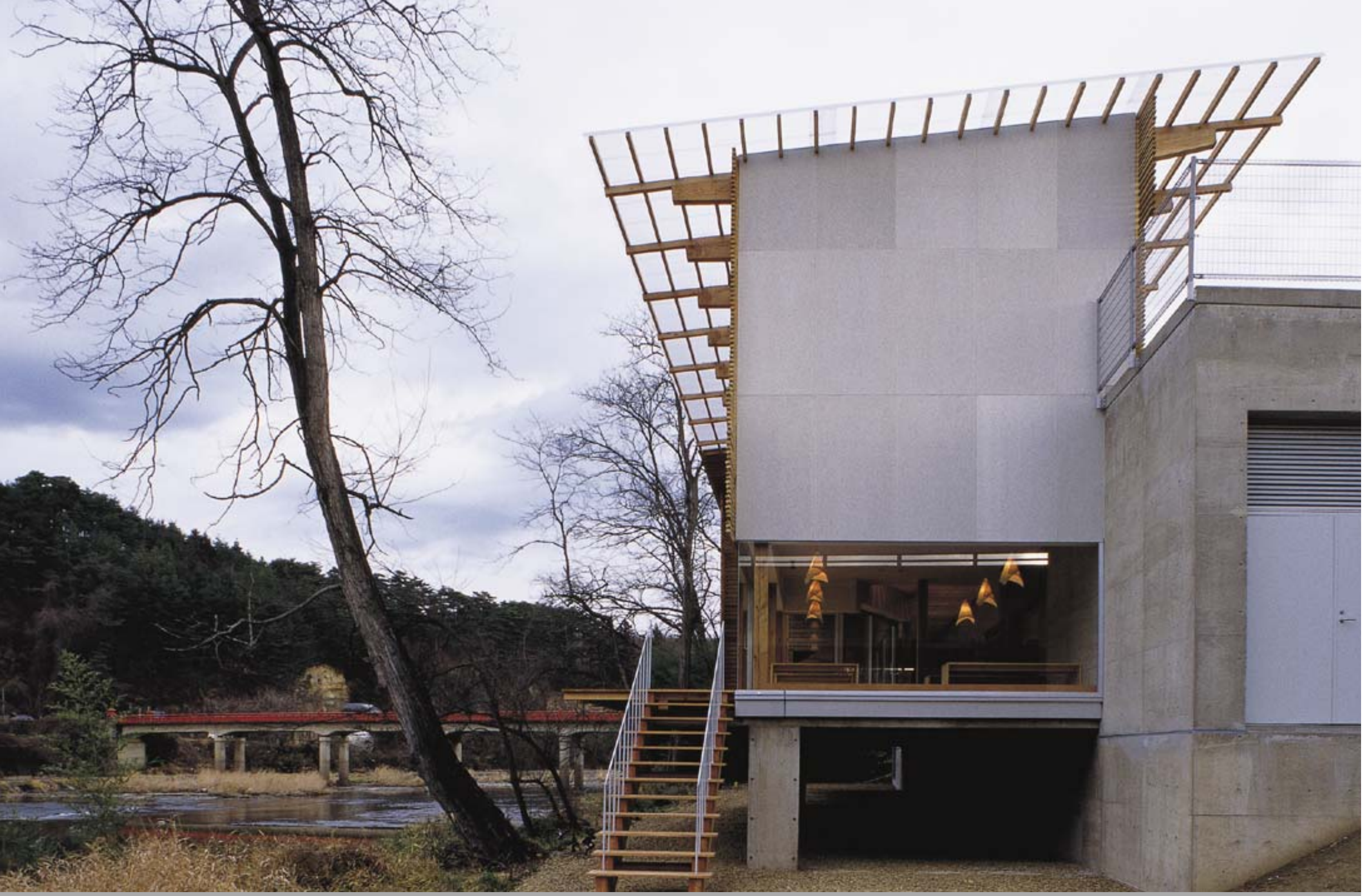
OPPOSITE TOP
VIEW FROM RIVER

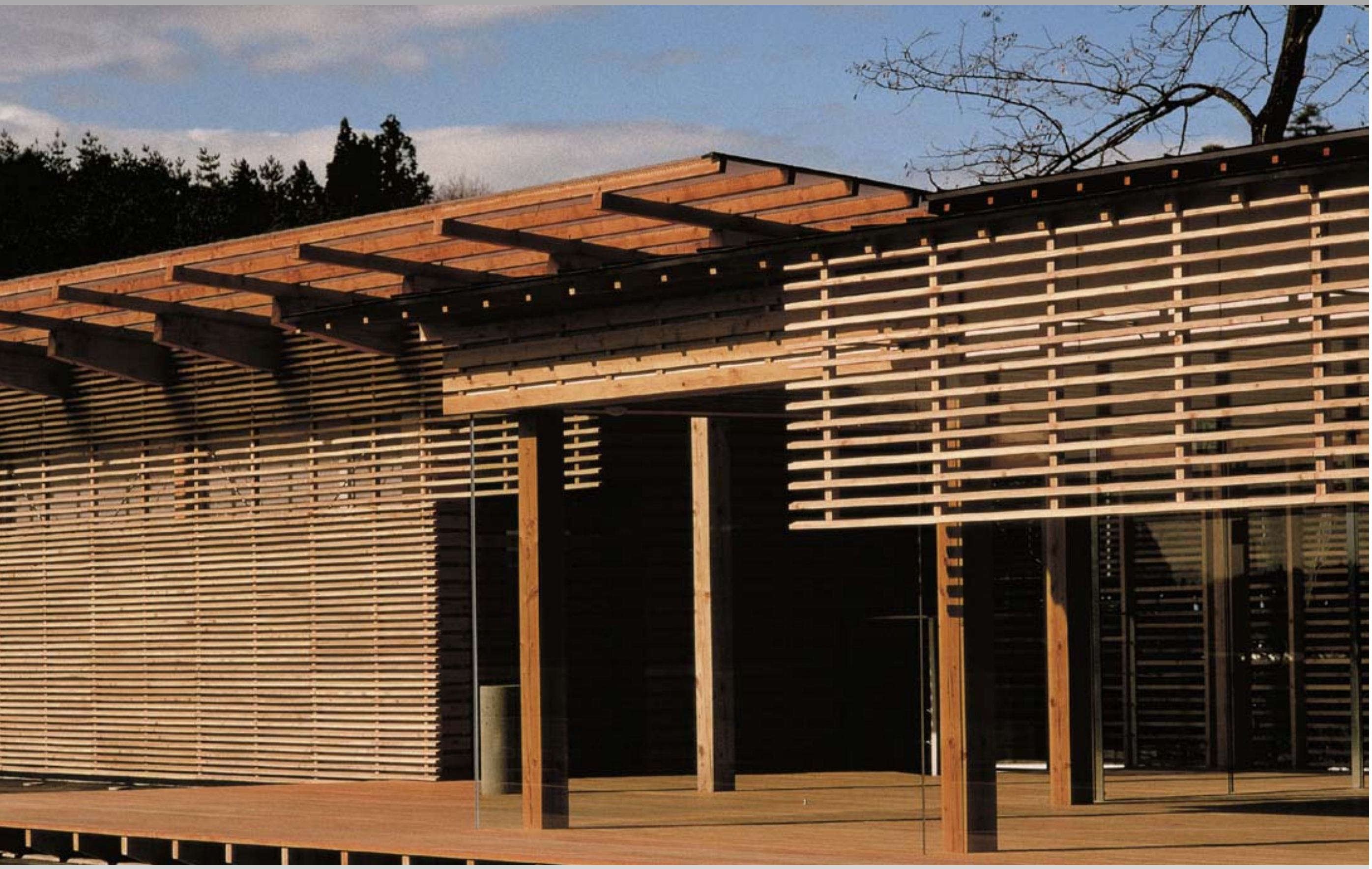
OPPOSITE BOTTOM
SECTION

TOP LEFT
SITE PLAN

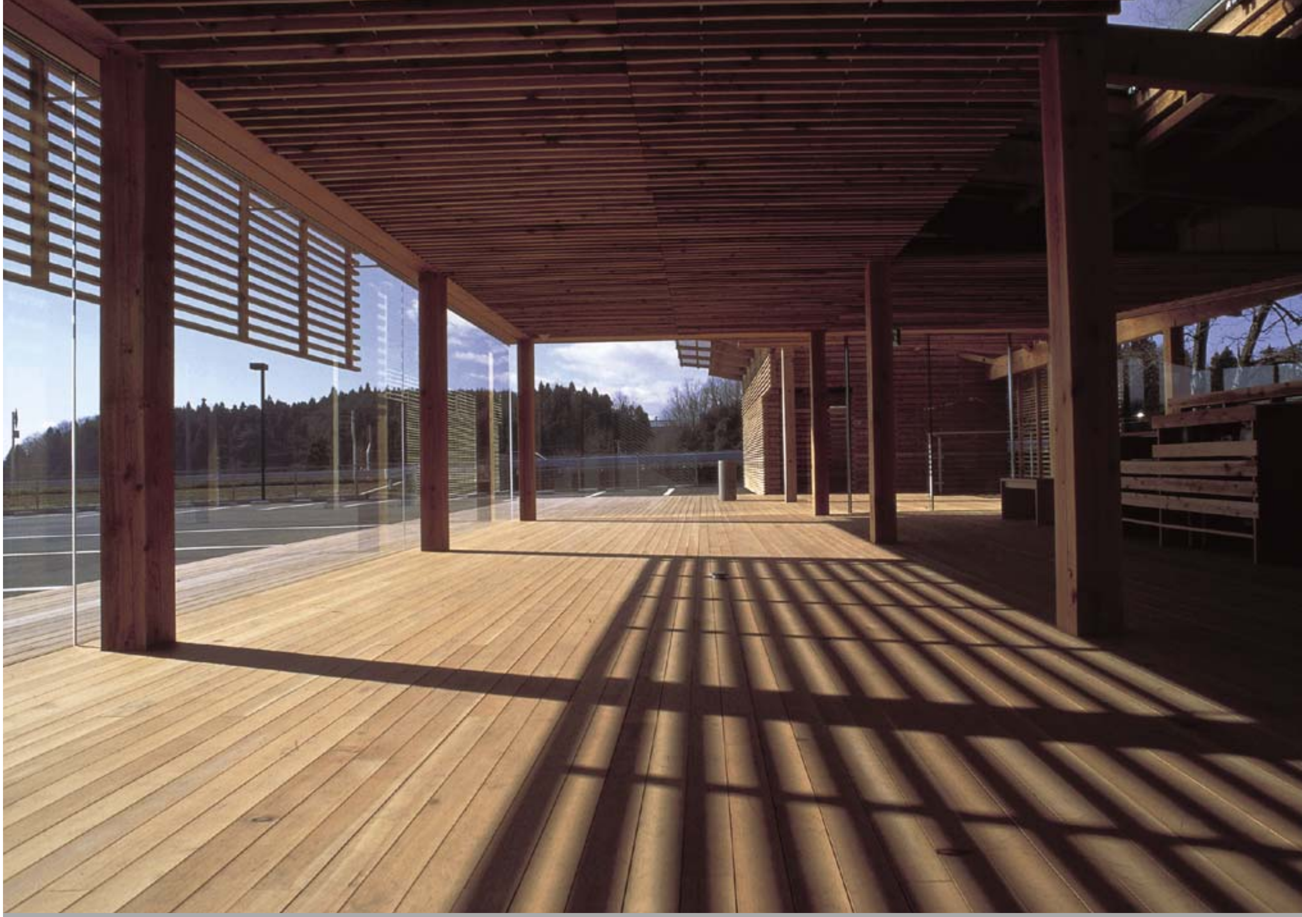
BOTTOM LEFT
FLOOR PLANS

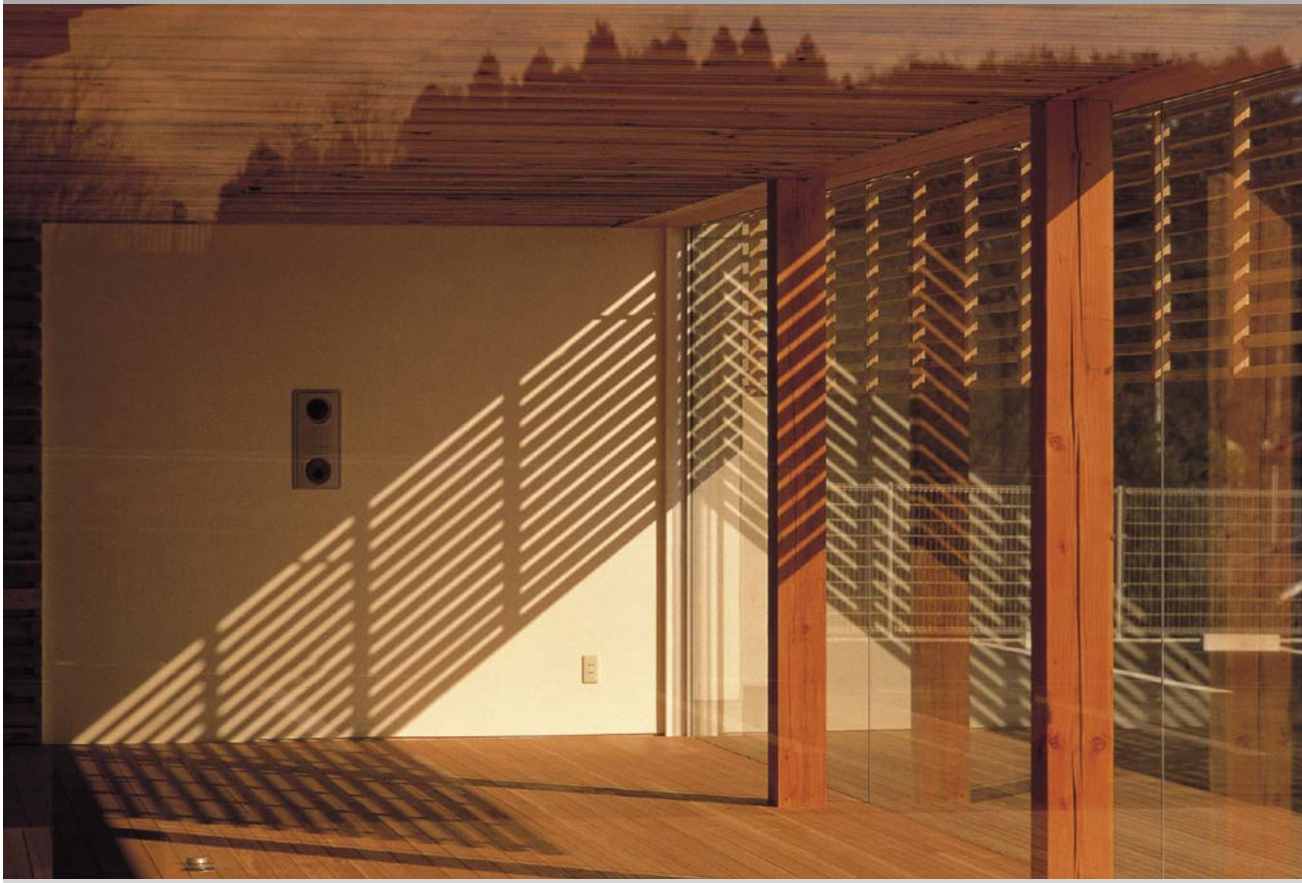
TOP RIGHT
RIVERSIDE ELEVATION



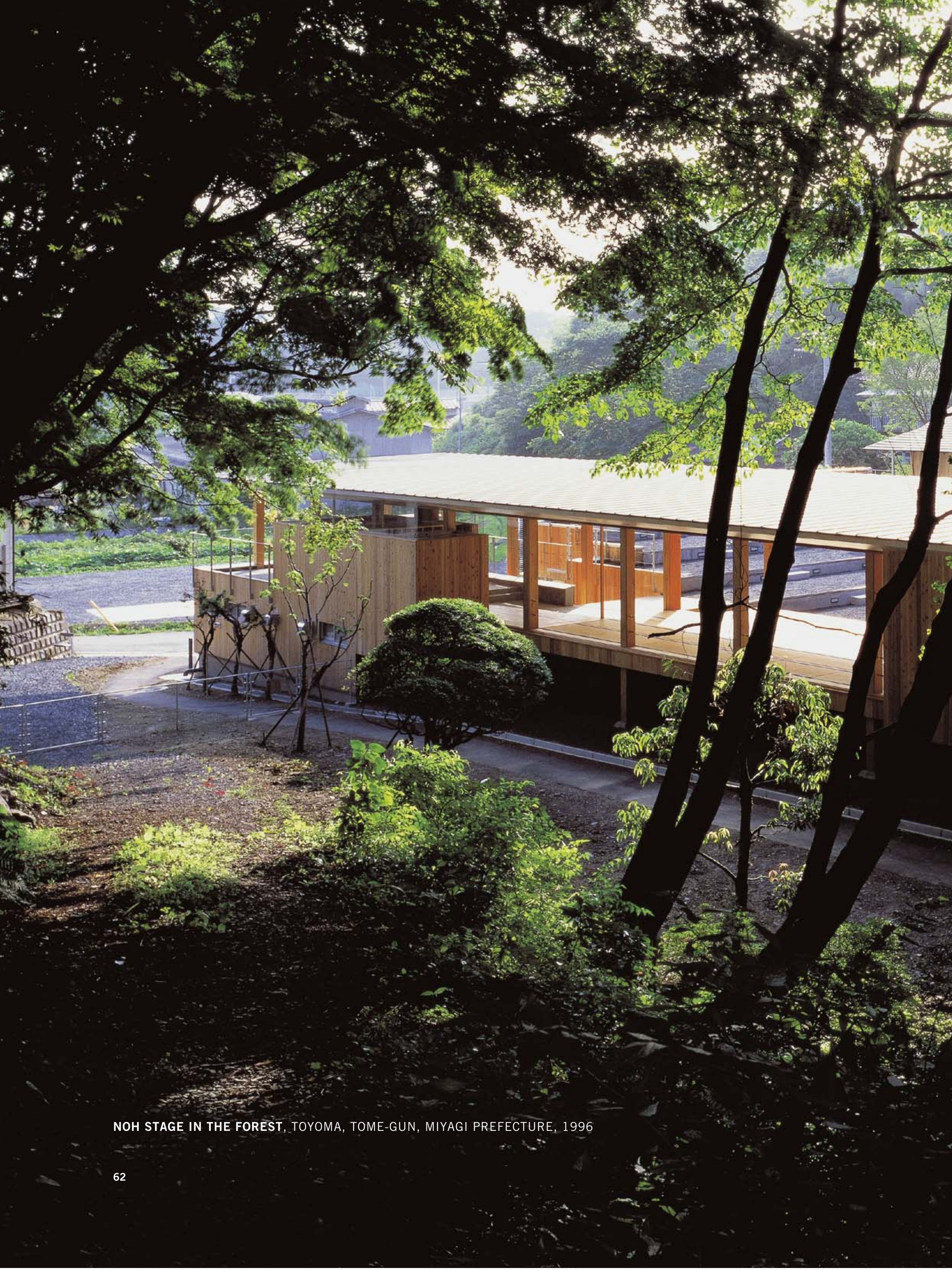


TOP / SIDE ELEVATION
BOTTOM / ENTRANCE ELEVATION

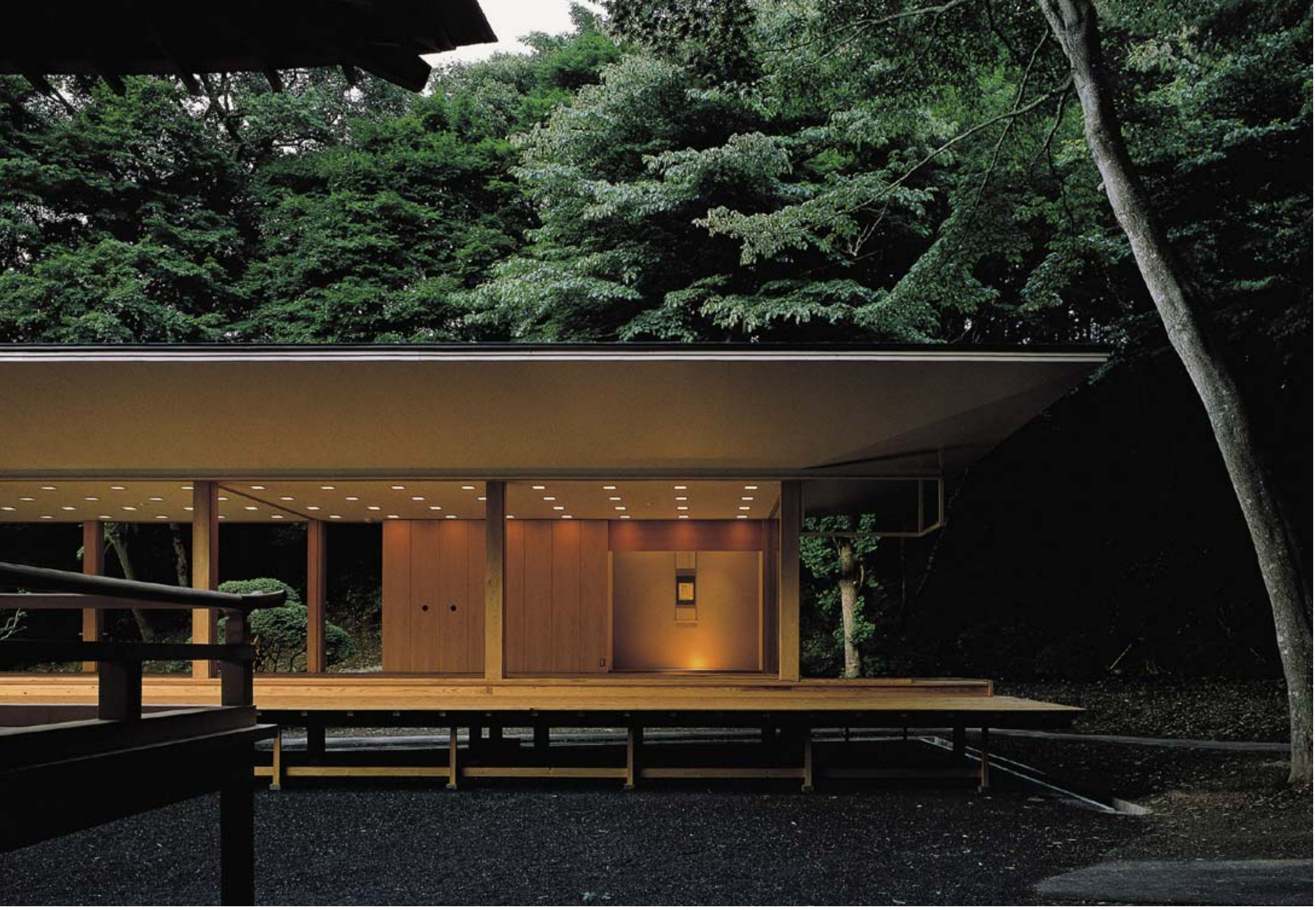




TOP / INTERIOR VIEW
BOTTOM / VIEW OF SHOP FROM OUTSIDE TERRACE



NOH STAGE IN THE FOREST, TOYOMA, TOME-GUN, MIYAGI PREFECTURE, 1996

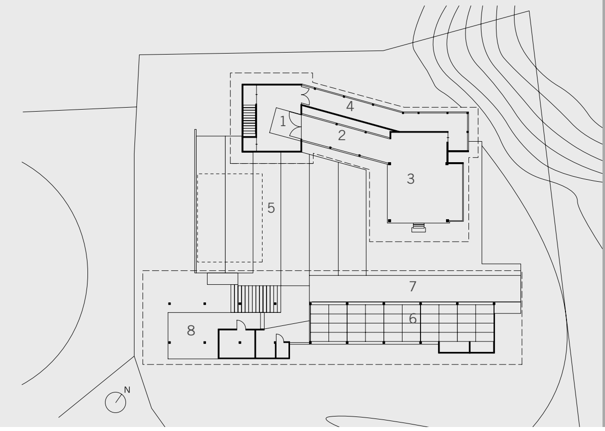


TOP
VIEW OF INSIDE SEATING AREA ACROSS THE COURTYARD

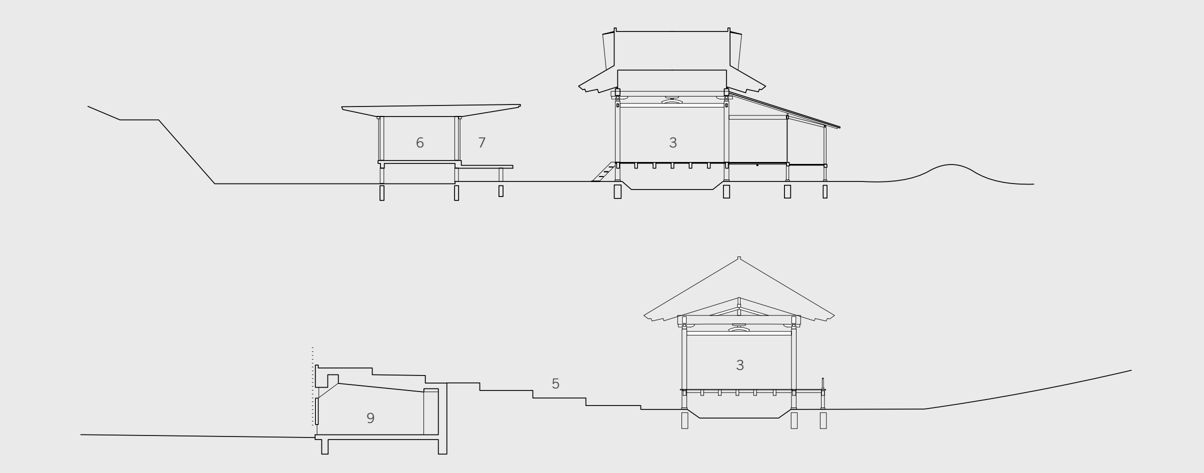
RIGHT
FLOOR PLAN

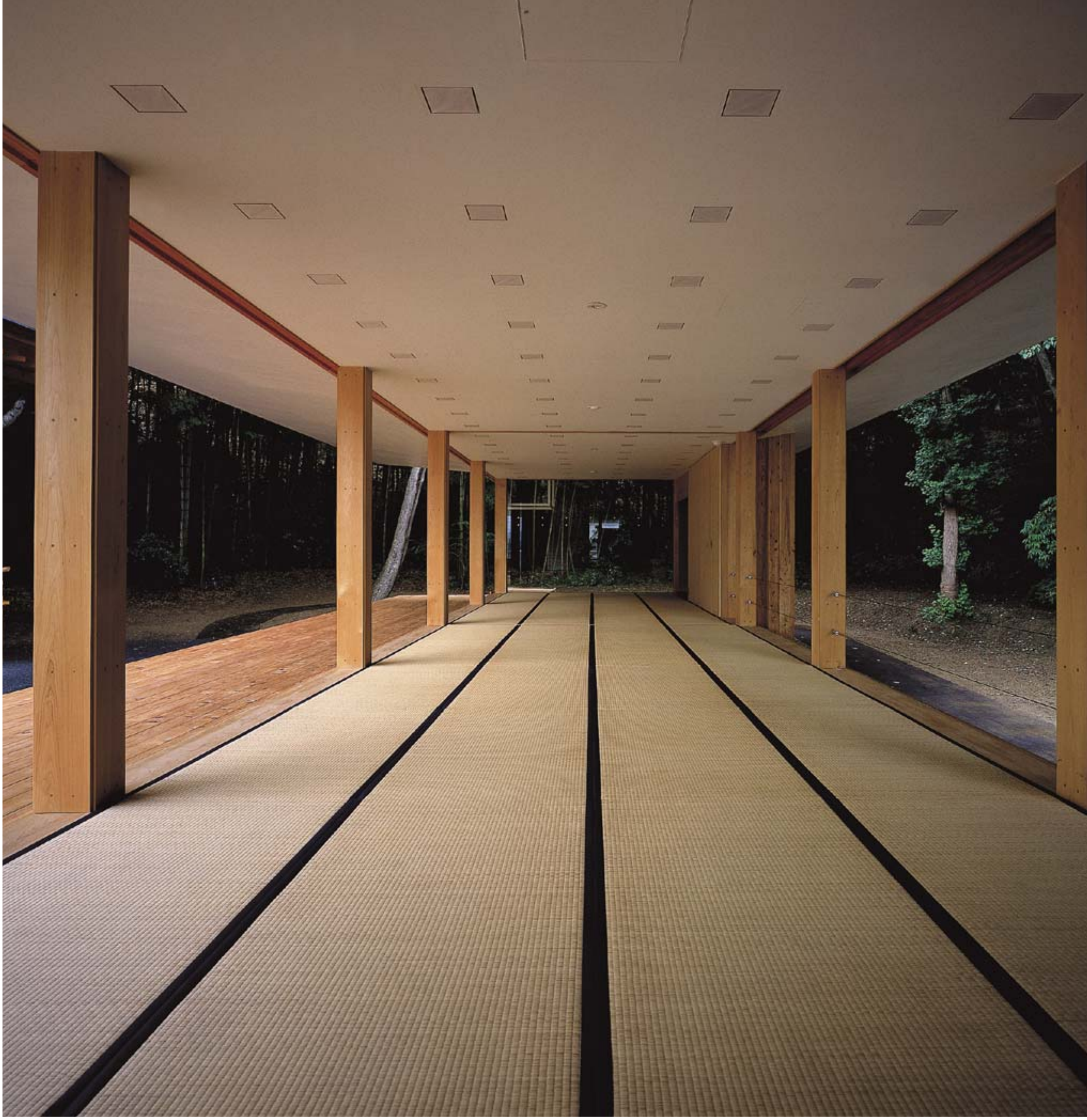
BOTTOM
SECTIONS

OPPOSITE
DETAIL OF INSIDE SEATING AREA



1 / DRESSING ROOM
2 / BRIDGE
3 / STAGE
4 / BACK PASSAGEWAY
5 / OUTSIDE SEATING
6 / INSIDE SEATING
7 / HIREON (TERRACE)
8 / TERRACE
9 / ENTRANCE AND EXHIBITION HALL

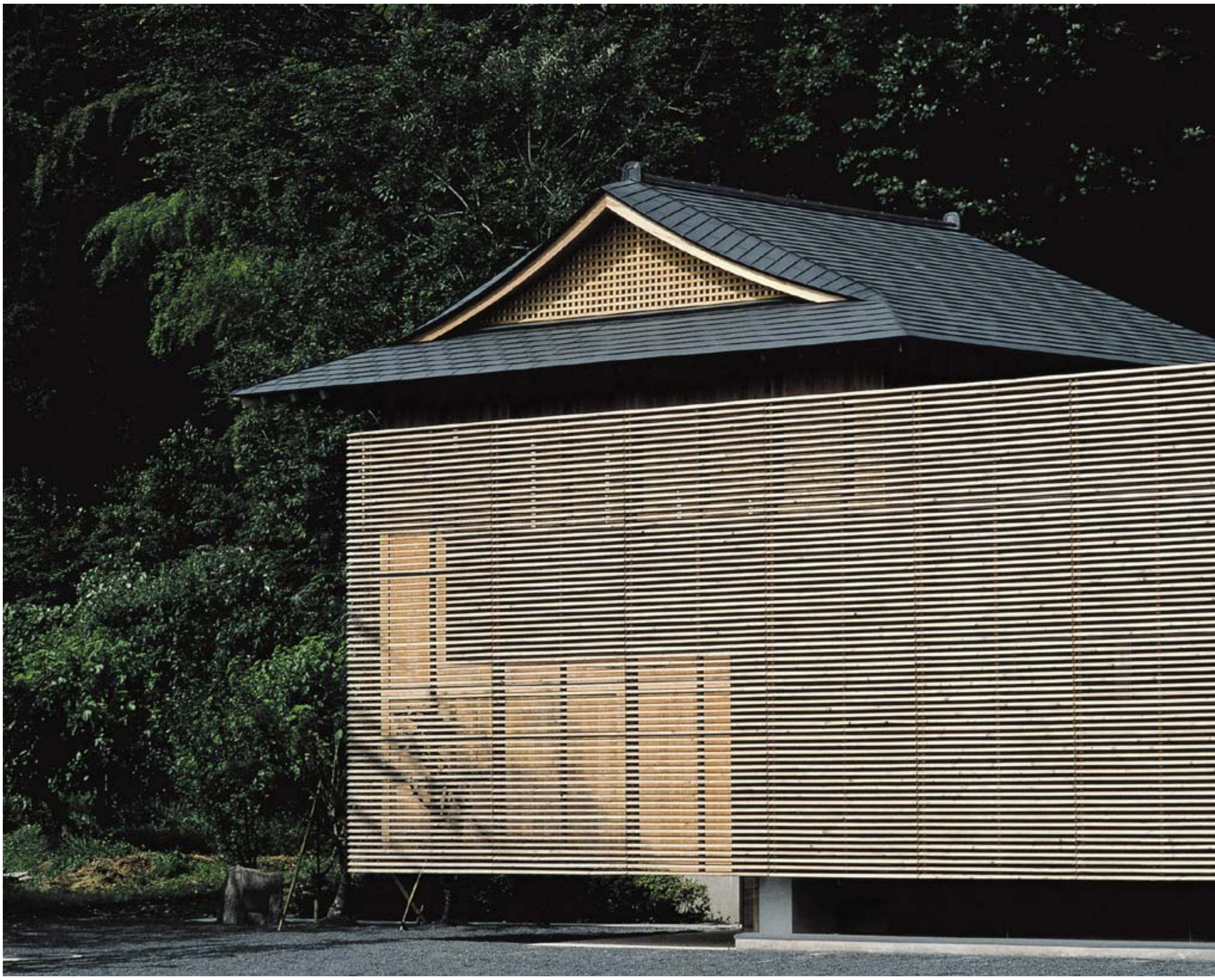




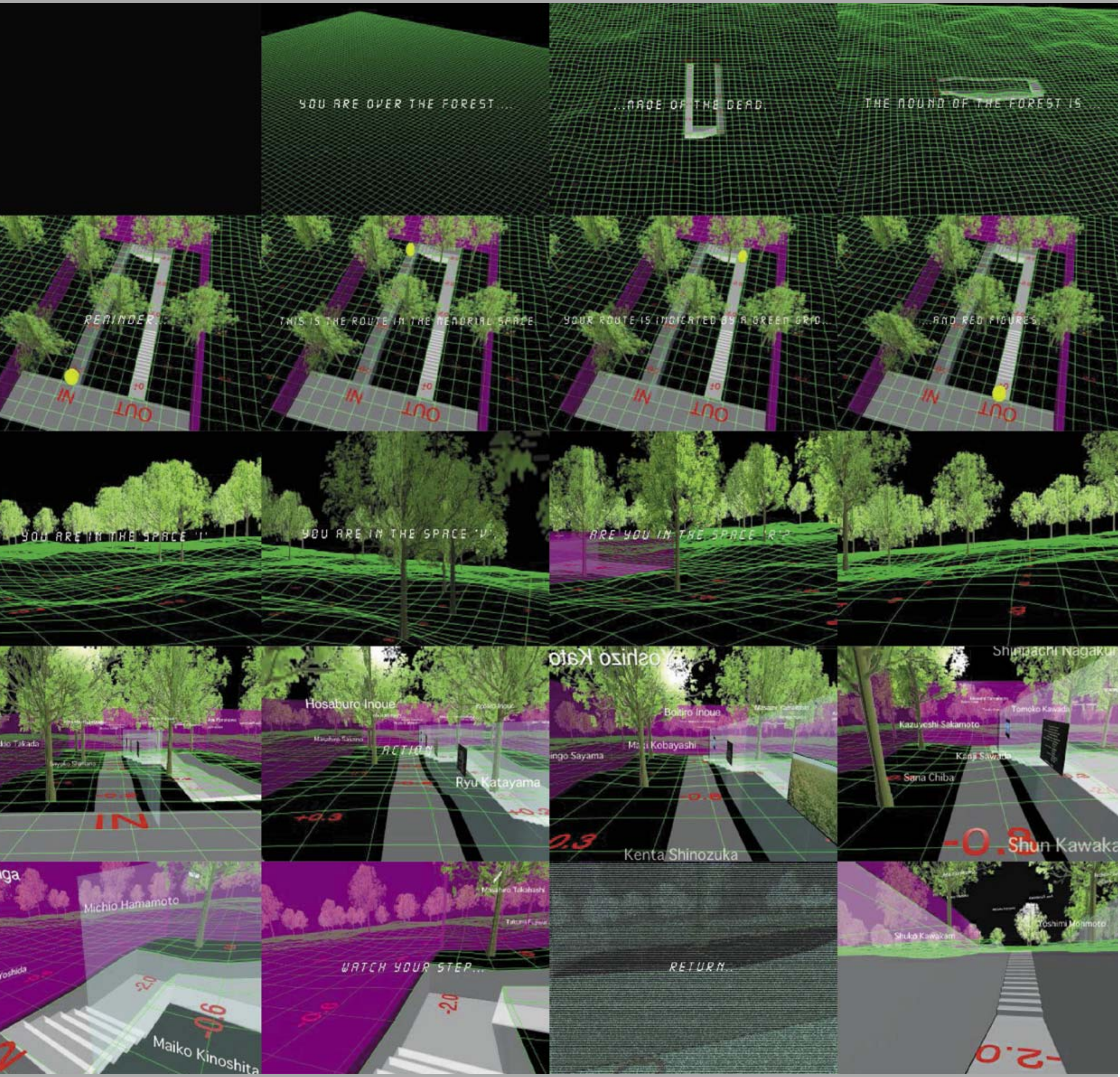
Noh performance, Japan's ancient form of theater, was first established in the sixteenth century. The town of Toyoma in Miyagi Prefecture is known for its unique style of Noh performance, called Toyoma Noh, which originated during the Edo era (1600–1868). Kuma's Noh stage was designed for performing Noh in a forest surrounding Toyoma. The fundamental concept of the project was to both liberate the stage from and integrate it with the wooded environment. Arranged across a small courtyard, the light and largely open wooden structures are immersed in nature while staking out a distinct place in the outskirts of this rural community.

Typically, a Noh stage is built independently within an overall architectural compound. This treatment was first introduced during the Meiji era (1868–1912) and still continues today. The origins of Noh, however, are found in plays that were performed in places surrounded by nature, with wind and other natural phenomena playing a role along with the performance. With his project Kuma aimed at reproducing Noh in its original style. Instead of building a piece of architecture for the performance, he created a garden for it.

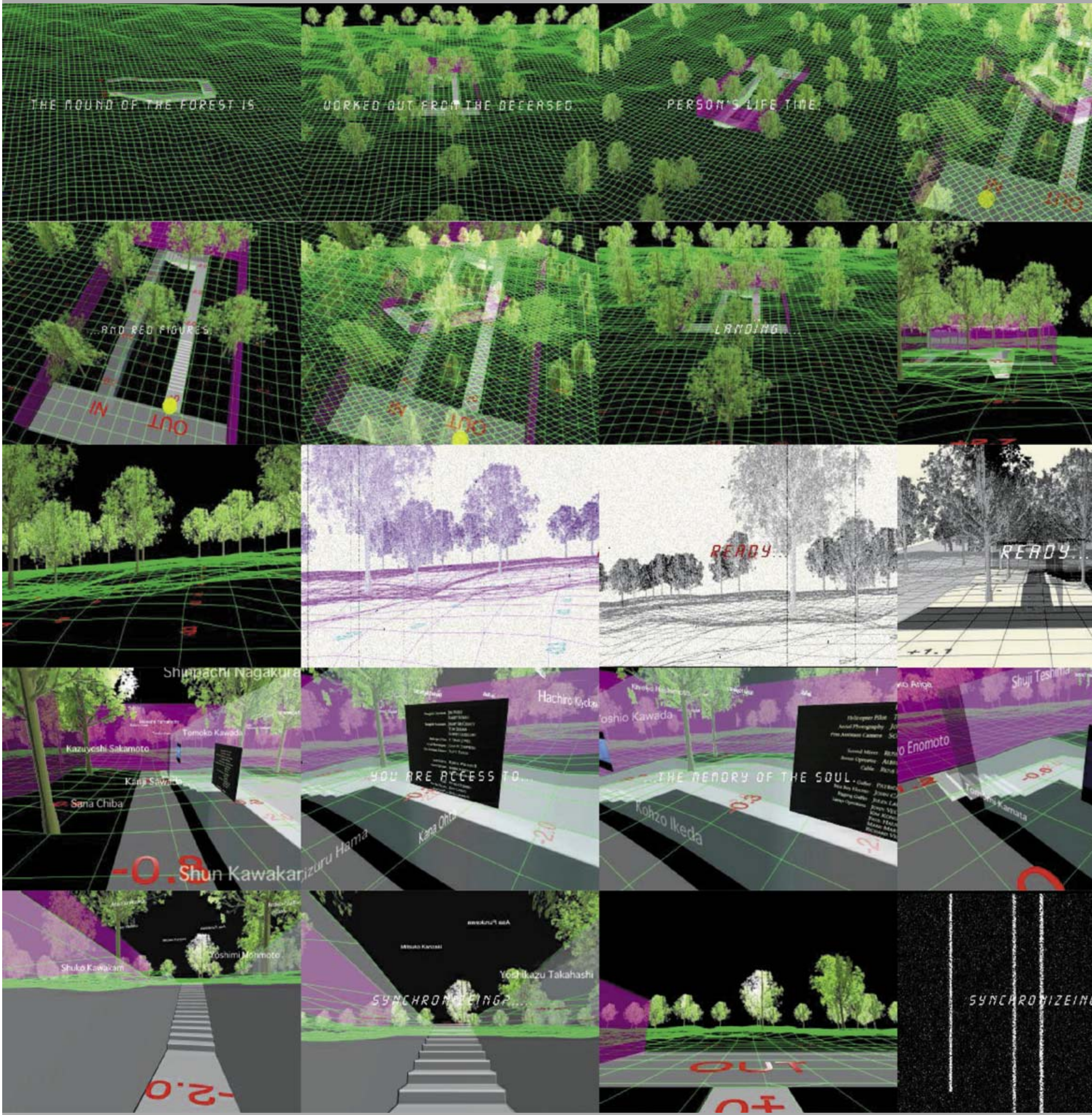
The Noh stage traditionally represents the world of death and the beyond, whereas the spectators' seating area stands for the world of life. By placing Shirasu stones on the courtyard between the stage and the seating structures, Kuma reinforced a clear separation between the two spaces, and thus the two worlds.

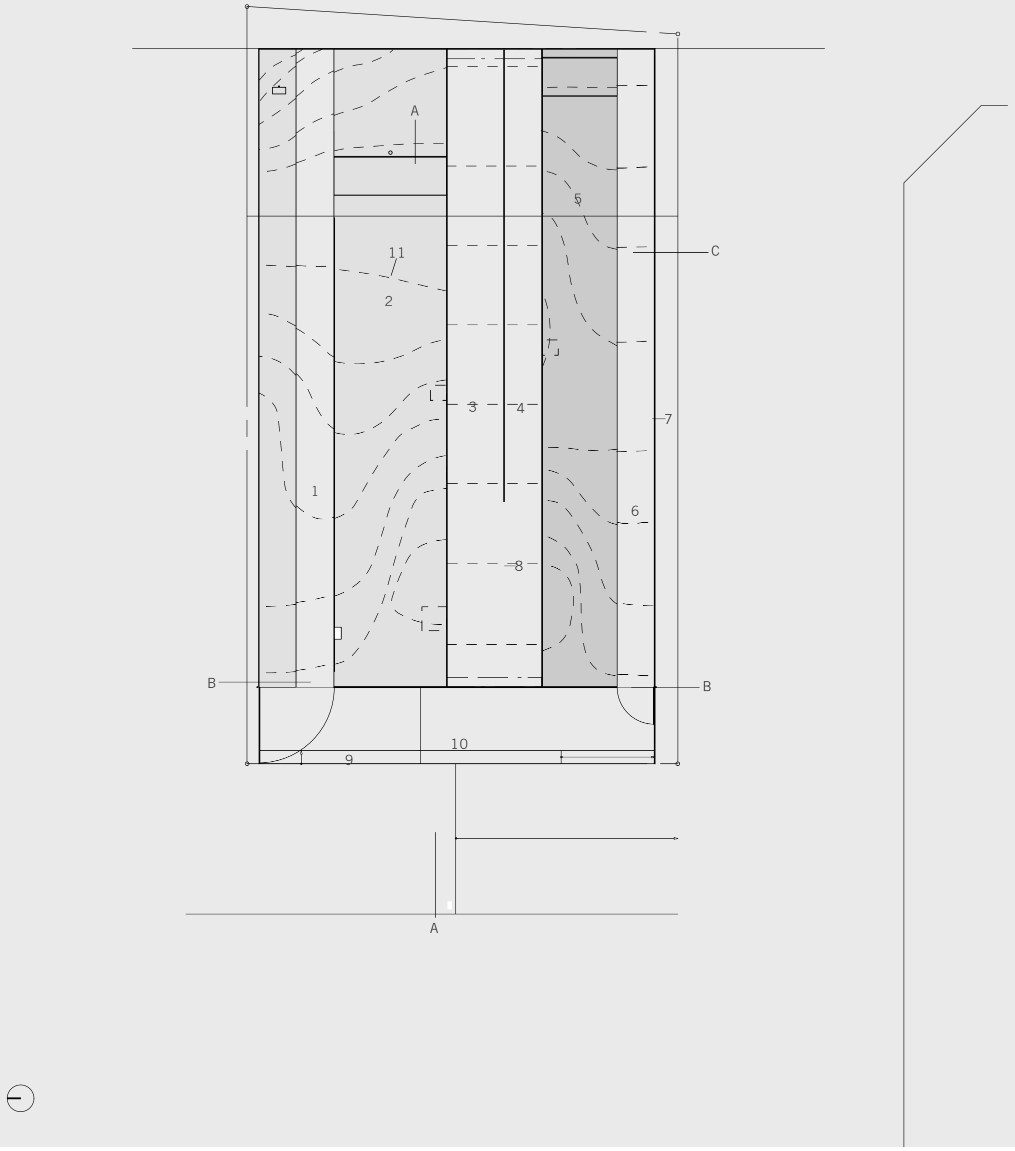


PREVIOUS PAGES / VIEW OF OUTDOOR SEATING AREA
OPPOSITE TOP / VIEW OF WEST (ENTRANCE) FACADE
OPPOSITE BOTTOM / VIEW OF INDOOR SEATING AREA FROM STAGE
ABOVE / DETAIL OF WEST (ENTRANCE) FACADE


YOU ARE OVER THE FOREST ...
...MADE OF THE DEAD.
THE MOUND OF THE FOREST IS ...
REMINDER...
THIS IS THE ROUTE IN THE MEMORIAL SPACE
YOUR ROUTE IS INDICATED BY A GREEN GRID...
...AND RED FIGURES.
IN
OUT
±0
YOU ARE IN THE SPACE 'I'
YOU ARE IN THE SPACE 'V'
ARE YOU IN THE SPACE 'R'?
Hosaburo Inoue
ACTION
Ryu Katayama
+0.3
Yoshizo Kato
Boriro Inoue
Kobayashi
Kenta Shinozuka
-0.6
Shinpachi Nagaku
Kazuyoshi Sakamoto
Tomoko Kawada
Sana Chiba
-0.3
Shun Kawaka
Michio Hamamoto
Maiko Kinoshita
-2.0
-0.6
WATCH YOUR STEP...
RETURN..
Yoshimi Morimoto
-2.0

MEMORIAL PARK, TAKASAKI, GUMMA PREFECTURE, 1997 (PROJECT)

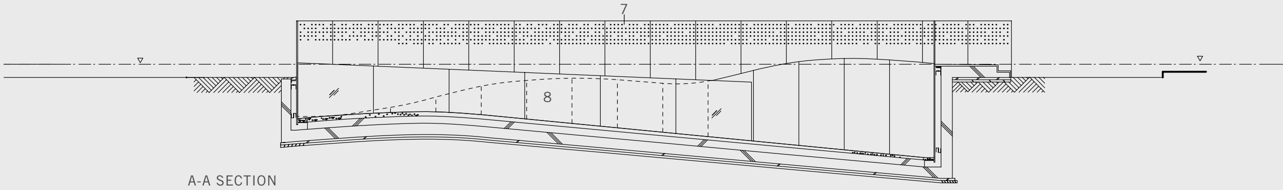

THE MOUND OF THE FOREST IS ...
...WORKED OUT FROM THE DECEASED...
...PERSON'S LIFE TIME.
IN
OUT
...AND RED FIGURES...
IN
OUT
LANDING...
READY...
READY...
+1.1
Shinpachi Nagakura
Tomoko Kawada
Kazuyoshi Sakamoto
Kana Sawada
Sana Chiba
-0.8
Shun Kawakami
Hachiro Kyok
YOU ARE ACCESS TO...
Kana Ohta
-2.0
Toshio Kawada
...THE MEMORY OF THE SOUL.
Helicopter Pilot
Aerial Photography
Kohzo Ikeda
Shuji Teshima
Enomoto
Tomomi Kamata
Shuko Kawakami
Toshimi Mohmoto
-2.0
Aoi Furukawa
Mitsuko Kanzaki
Yoshikazu Takahashi
SYNCHRONIZEINGA.....
OUT
+0
SYNCHRONIZEING



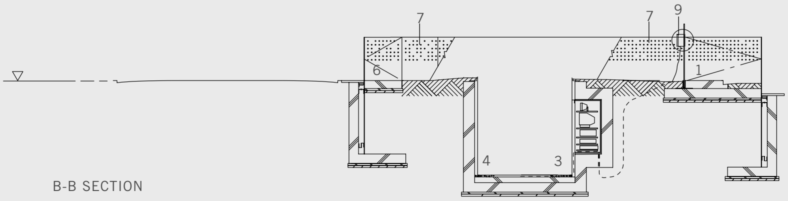
Memorials are built to establish a connection between the present and the past, between life and death. They usually take the form of stone monuments; it is Kuma's belief, however, that the solid form of a monument may intrude on the intimacy of real memories. Consequently, for this memorial dedicated to the late employees of a private company in Gumma Prefecture, he proposed instead a landscape garden. The computer system contained in this garden effectively links cyberspace and landscape and conceptually minimizes the presence of an object.

Kuma's proposal for the Memorial Park is based on abstracting and condensing the landscape of Gumma Prefecture, including the Takasaki and Haruna mountains, into a site of 61.6 by 34.5 feet (18.8 by 10.5 meters), which is surrounded by a perimeter wall with punctured openings for air circulation. Paths lined with vertical glass panes lead the visitors through the space twice. On the glass, the names of the deceased are engraved, arranged according to an order that specifies the region of each person's origin.

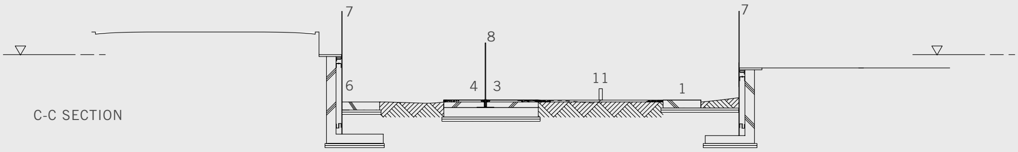
The visitor first operates a computer panel in order to access the recorded (electronic) site of the deceased. Once the location of the deceased's name within the Memorial Park is confirmed, a piece of music by Kenichi Sakakibara, peculiar to each individual encounter, starts to play, corresponding with the visitor's footsteps on his way to the site. In addition to the music, lighting effects contribute to the interactive environment. At Kuma's Memorial Park the recollection of the dead is thus achieved through a multimedia simulation rather than a physical object.



A-A SECTION



B-B SECTION

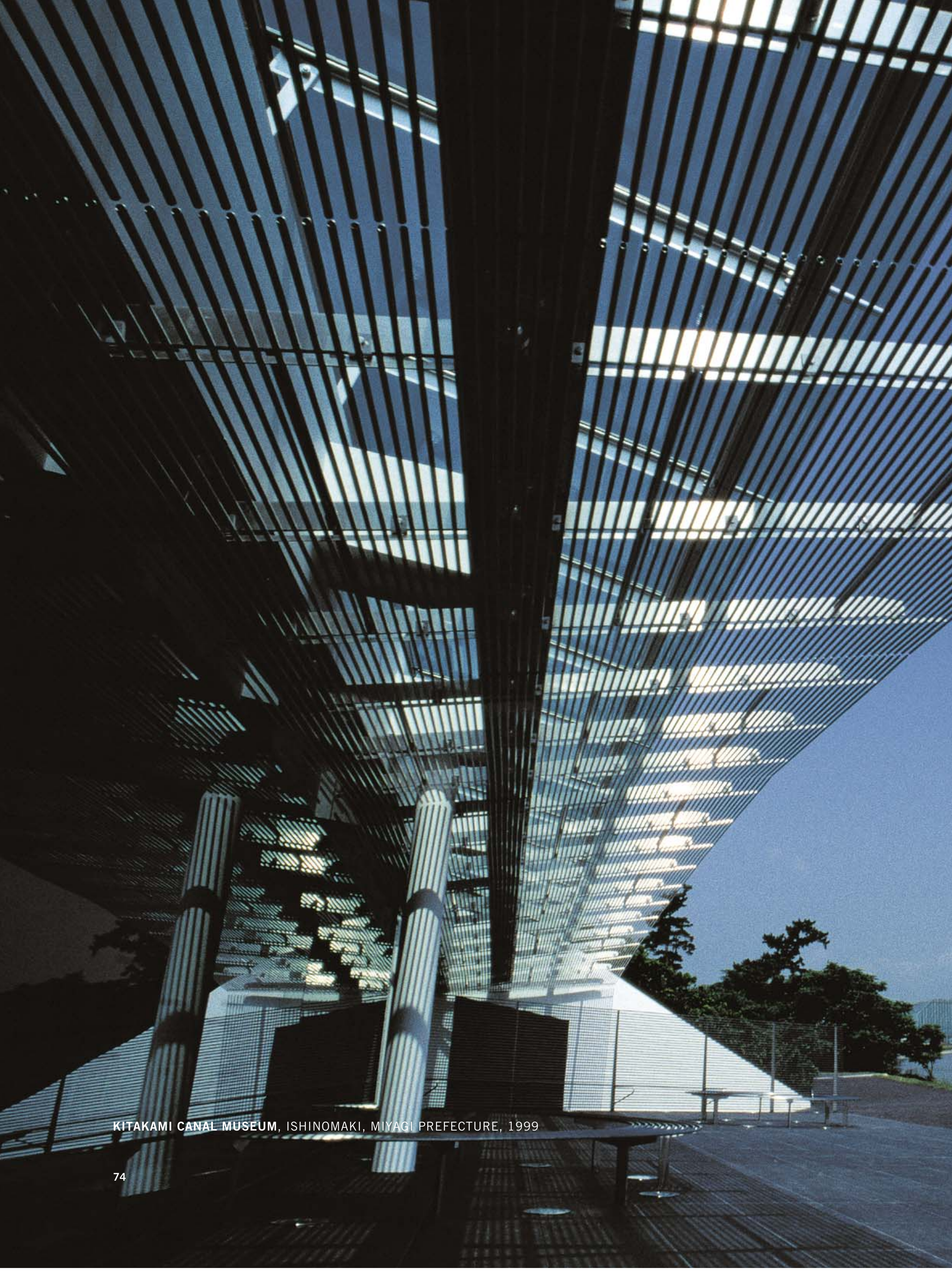


C-C SECTION

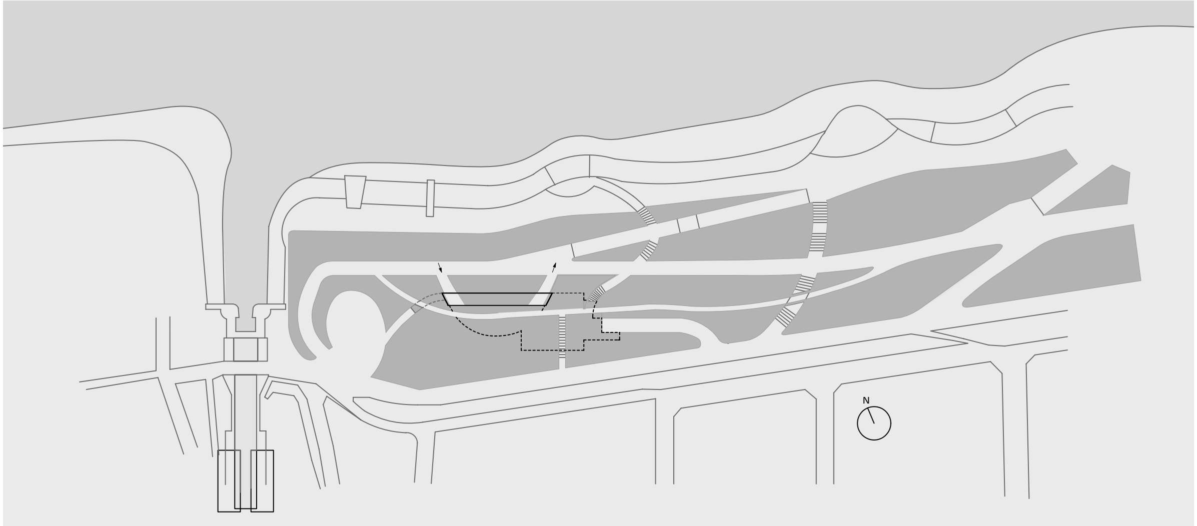
1 / PATH A
2 / PATH B
3 / PATH C
4 / PATH D
5 / PATH E
6 / PATH F

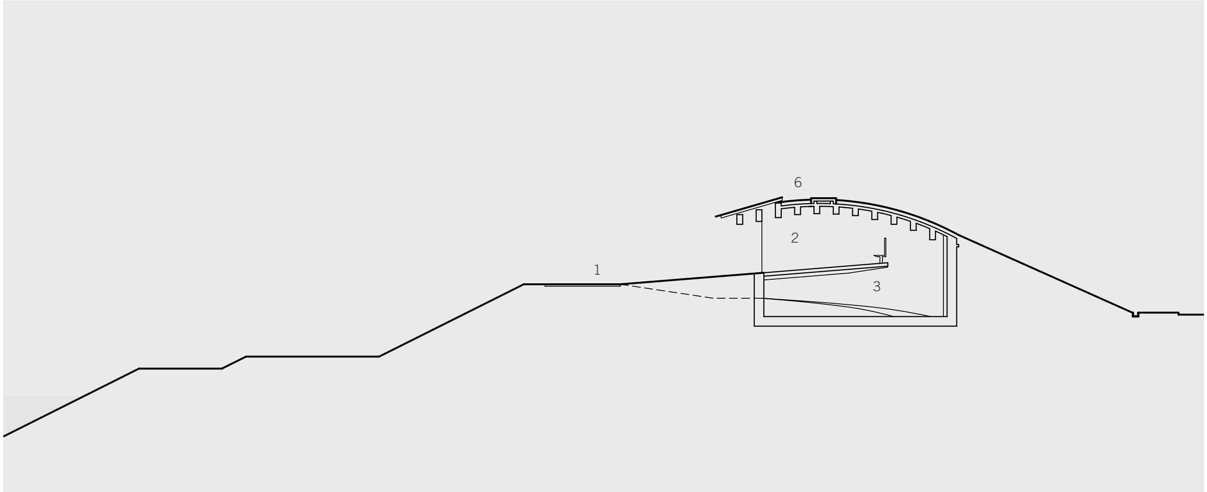
7 / PERFORATED STEEL PERIMETER WALL
8 / VERTICAL GLASS PANES
9 / COMPUTER PANEL
10 / SPEAKER AND COMPUTER DISPLAY
11 / MICROPHONE

OPPOSITE TOP / PLAN
ABOVE / SECTIONS



KITAKAMI CANAL MUSEUM, ISHINOMAKI, MIYAGI PREFECTURE, 1999


N



OPPOSITE TOP
SITE PLAN

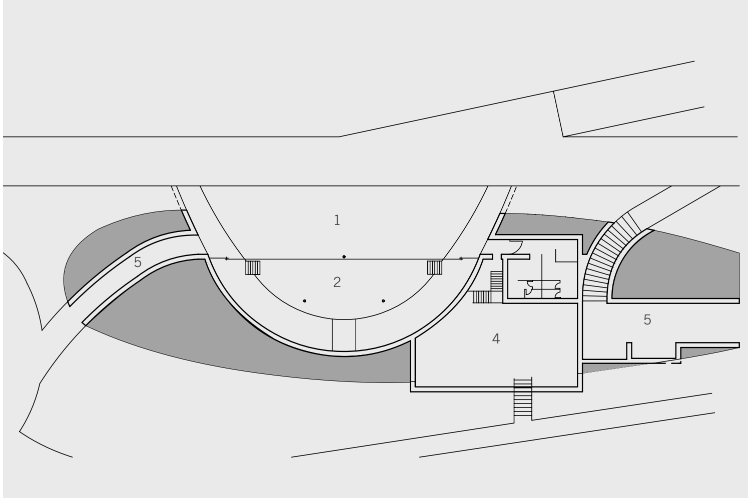
OPPOSITE MIDDLE
VIEW FROM THE DISTANCE

OPPOSITE BOTTOM
LANDSCAPE OVER THE ROOF OF THE MUSEUM

TOP
SECTION

BOTTOM
FLOOR PLAN

1 / OUTER PLAZA
2 / INNER PLAZA
3 / SLOPE
4 / MECHANICAL ROOM
5 / PASSAGE
6 / PATH ON THE HILL

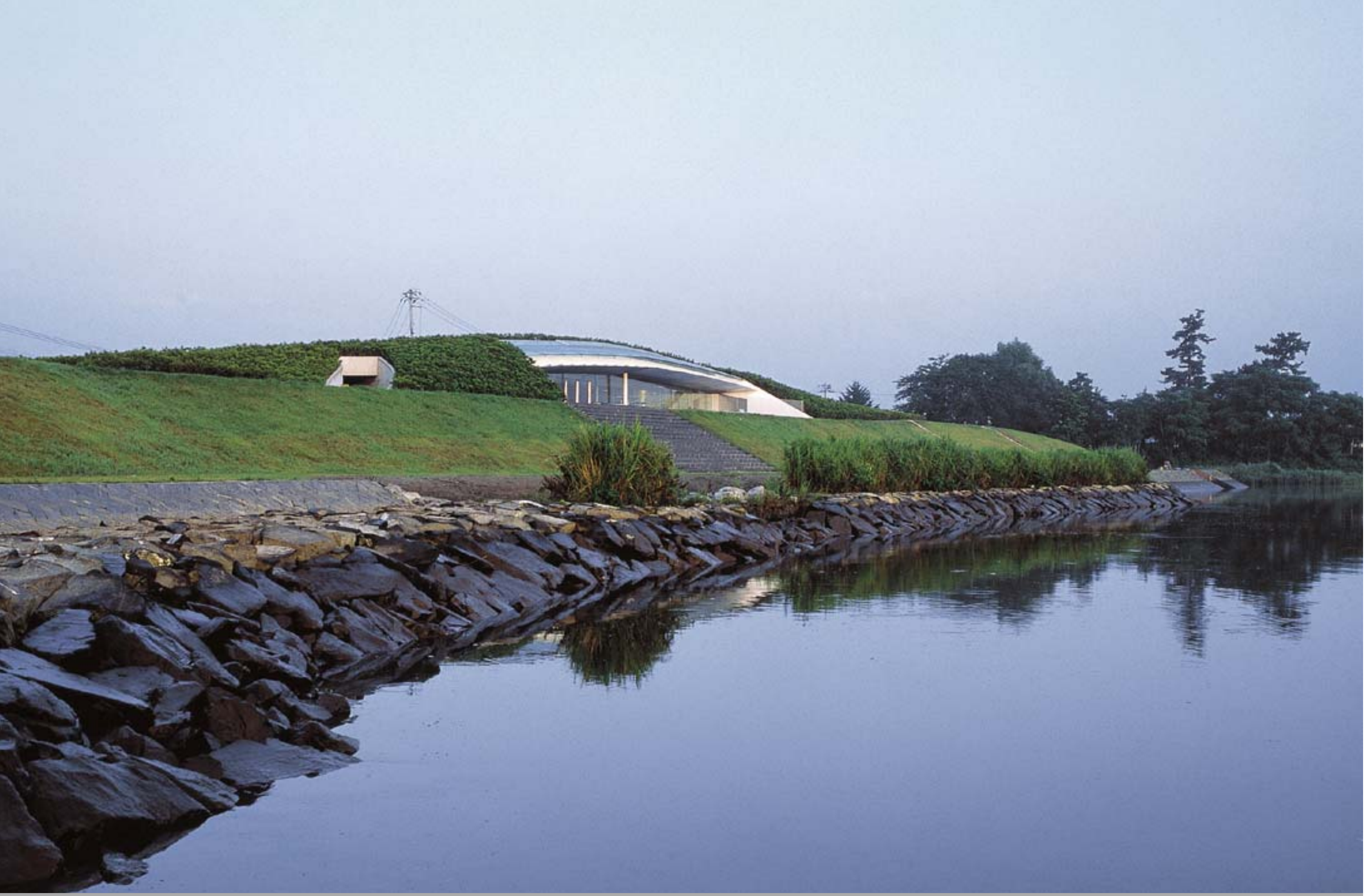


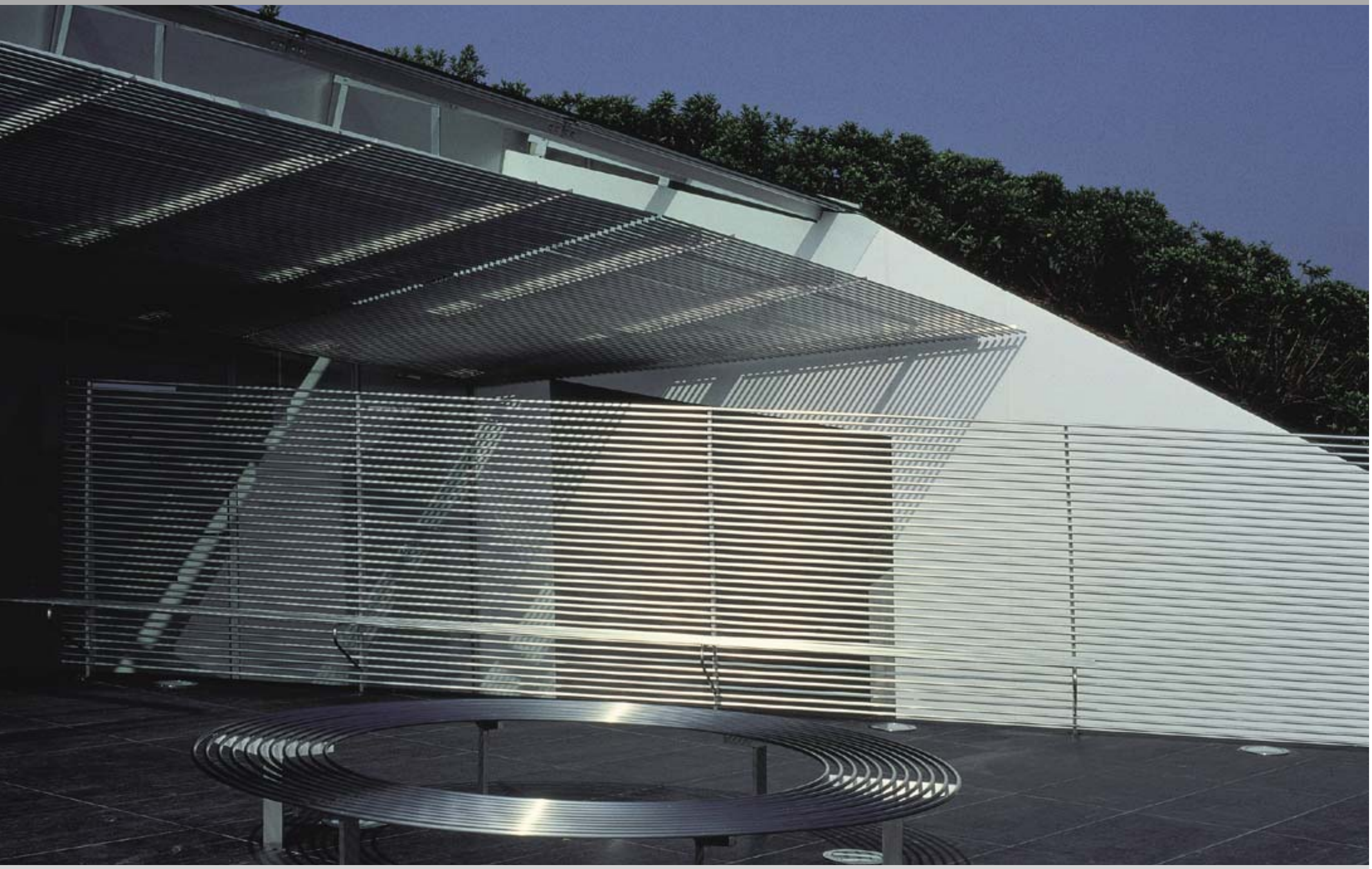
The Kitakami Canal Museum is a small gallery and recreation area at the intersection of the Kitakami Canal, one of the oldest canals in Japan, and the Kitakami River. The structure is embedded in the embankment so that its exterior is almost completely hidden, with the surrounding park and a bicycle path continuing above the museum. The facility was designed to encompass an existing walkway along the embankment, which passes through the underground space.

The walkway, taking a U-shape, virtually turns into architecture; the outside landscape and the architecture of the building thus become connected entities, forming continuity along a single line and resulting in an ambiguity of boundaries between architecture, landscape, and infrastructure. A canal can be considered as being both natural and artificial; Kuma's intention was to recreate this bridge between nature and architecture in his design.

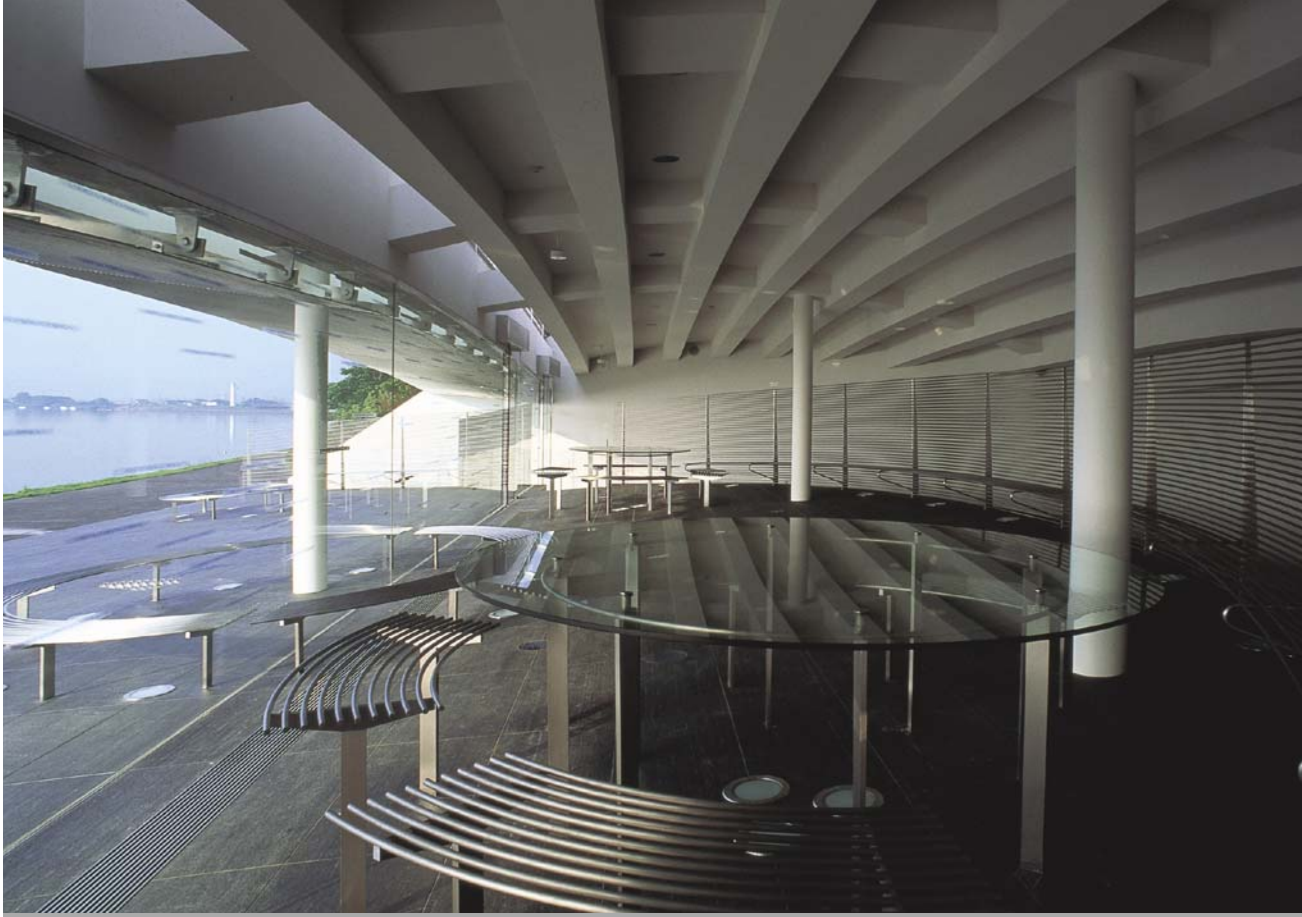
Visitors enter on the upper level of the museum under a canopy of a thin stainless-steel tube louver, which is reflected in the glass facade along with the serene landscape beyond. From this level, which functions as an inner plaza featuring a small lobby and some service facilities, one descends on a curving ramp into a largely empty space that contains computer monitors with touch screens. Operating these, visitors can access audio-visual information on a wide variety of canals all over the world. From the gallery the continuing ramp of the curving passage leads to the exit of the building.

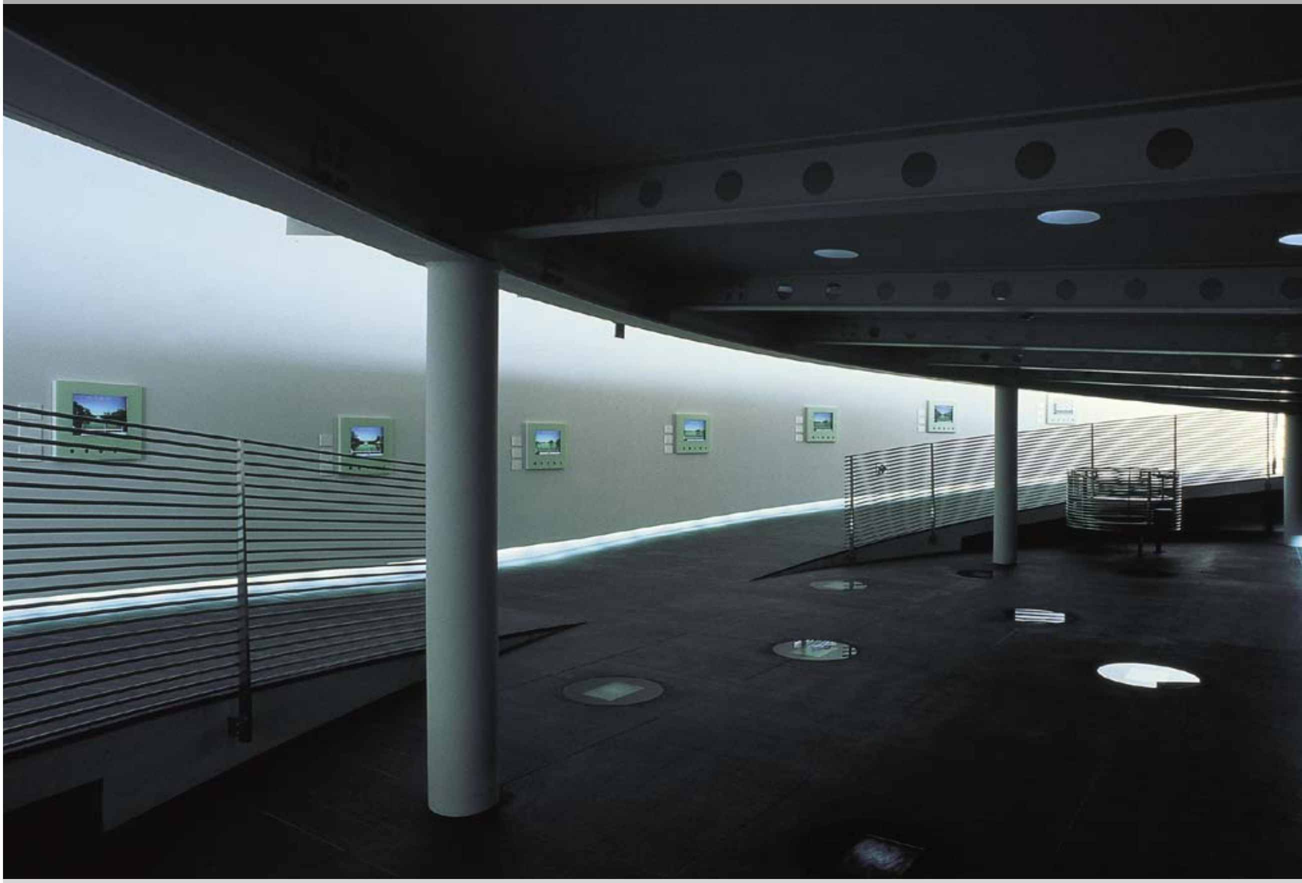
This project, along with the Kiro-san Observatory and the Horai Onsen Bath House, remains one of Kuma's most minimalist architectural statements.



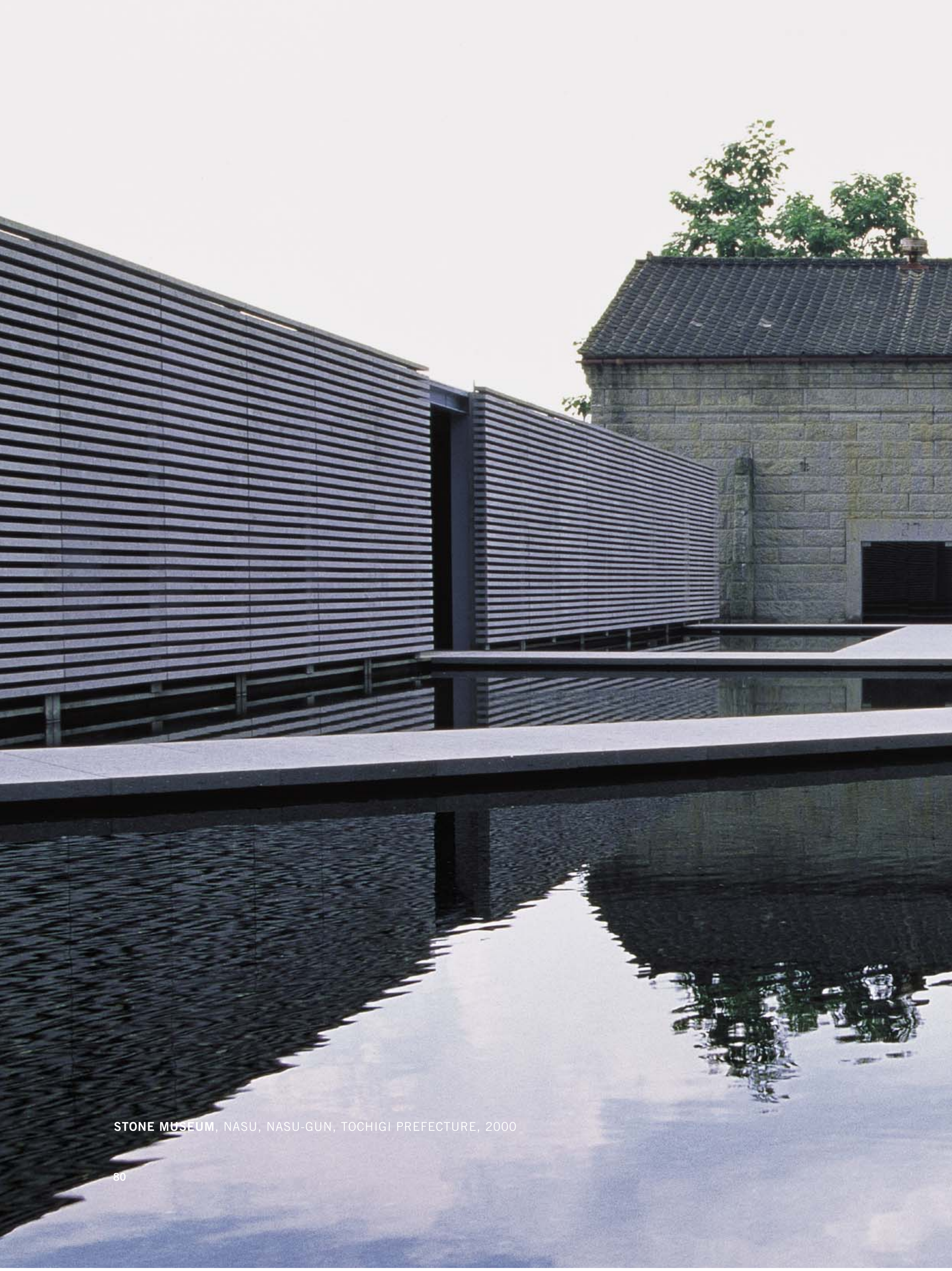


TOP / OVERALL VIEW OF THE BURIED MUSEUM
BOTTOM / ENTRANCE DETAIL

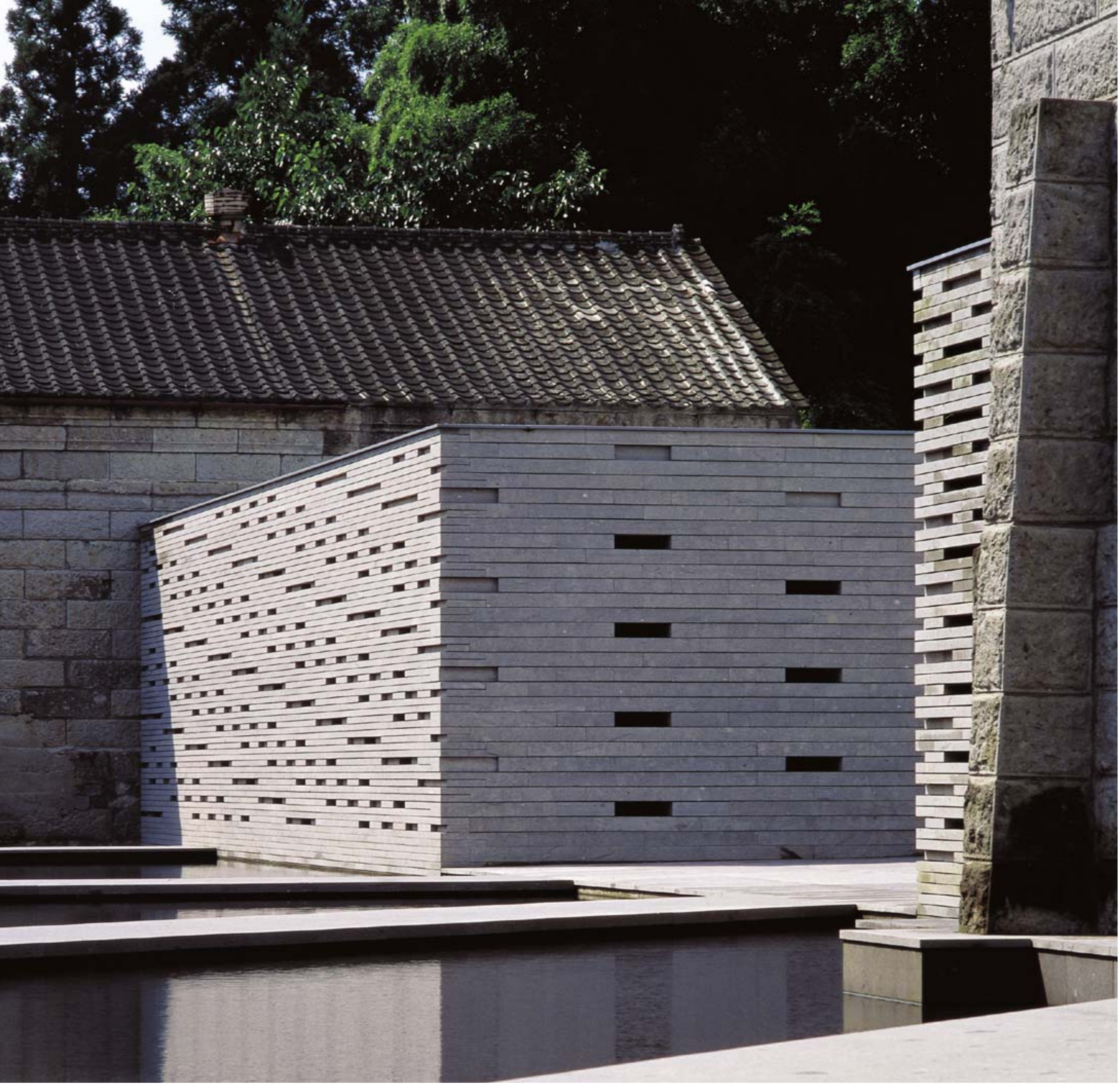


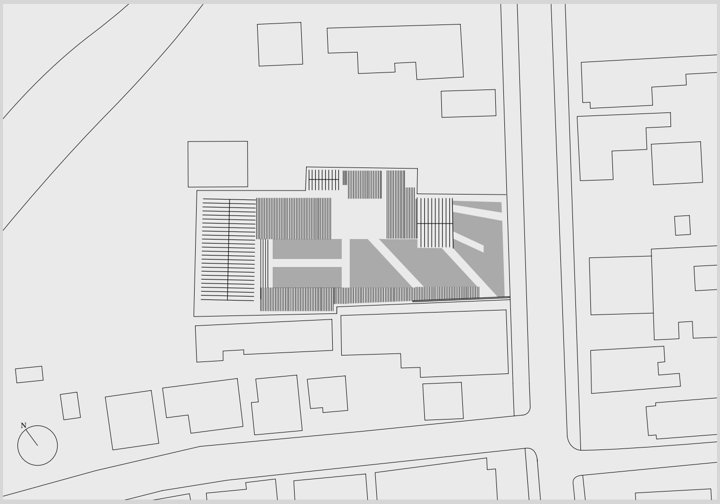


TOP / INNER PLAZA
BOTTOM / LOWER-LEVEL DISPLAY AREA



STONE MUSEUM, NASU, NASU-GUN, TOCHIGI PREFECTURE, 2000





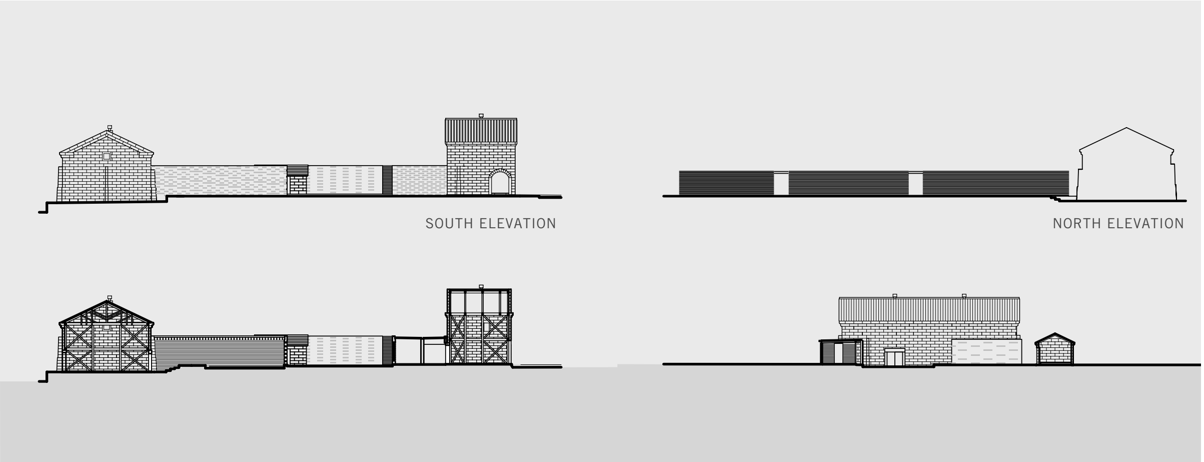
TOP
DETAIL OF NEW ADDITION

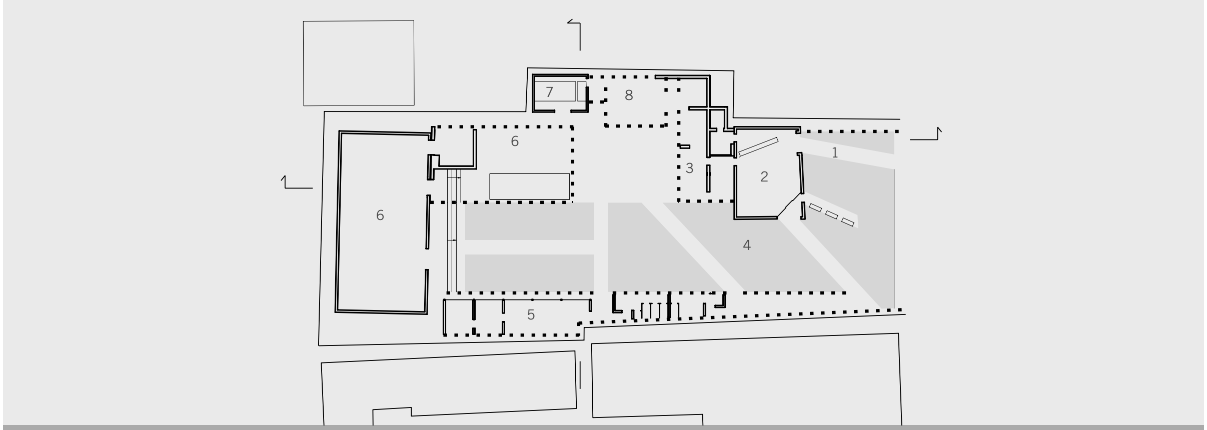
BOTTOM
SITE PLAN

OPPOSITE TOP
SOUTH AND NORTH ELEVATIONS

OPPOSITE MIDDLE
SECTIONS

OPPOSITE BOTTOM
FLOOR PLAN





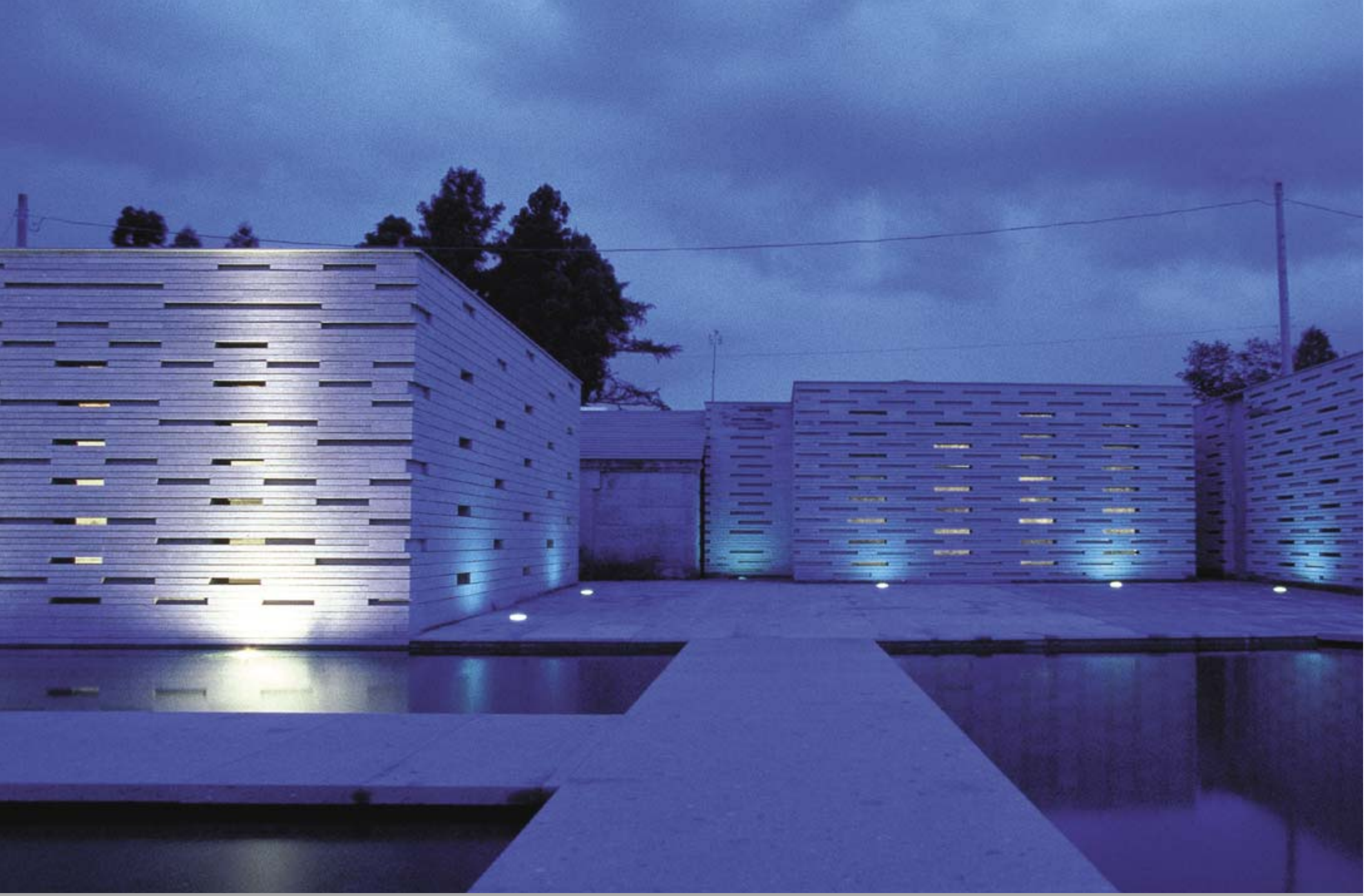
1 / APPROACH
2 / ENTRANCE HALL
3 / OFFICE
4 / REFLECTING POOL
5 / LIBRARY
6 / GALLERY
7 / TEA ROOM
8 / EXHIBITION SPACE

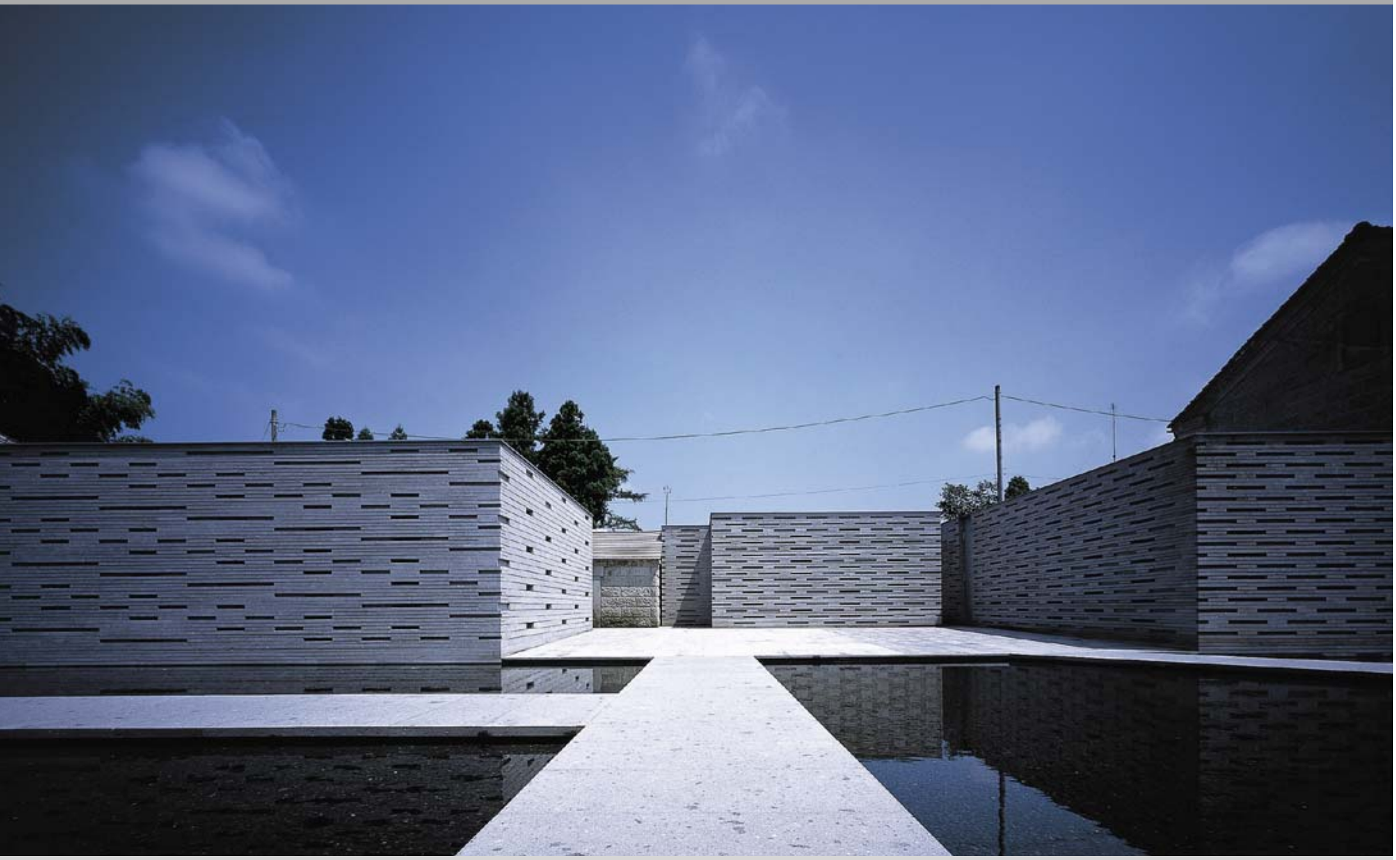
This project aimed at restoring the three traditional Japanese storehouses on the site. The program for the new museum of stone arts and crafts called for the reuse of these separate old stone structures, which were to be unified into a joint complex by the introduction of new spaces and passageways. The new structures, made up of two types of lightweight walls built of the same stone that was used for the existing buildings, also accomplished a spatial unification between the interior spaces and the immediate environment.

The first type of wall is composed of a series of stone slats (louvers) cut to dimensions of 1.56 by 5.87 inches (40 by 150 mm). As stone is a heavy and hard material, processing it into this slim size was a serious challenge, but a sense of lightness, ambiguity, and softness was to be gained by “de-solidifying” the material. With the help and expertise of the client, the owner of the quarry from where the stone was obtained, Kuma experimented with the material for an extended period of time in order to arrive at the desired result.

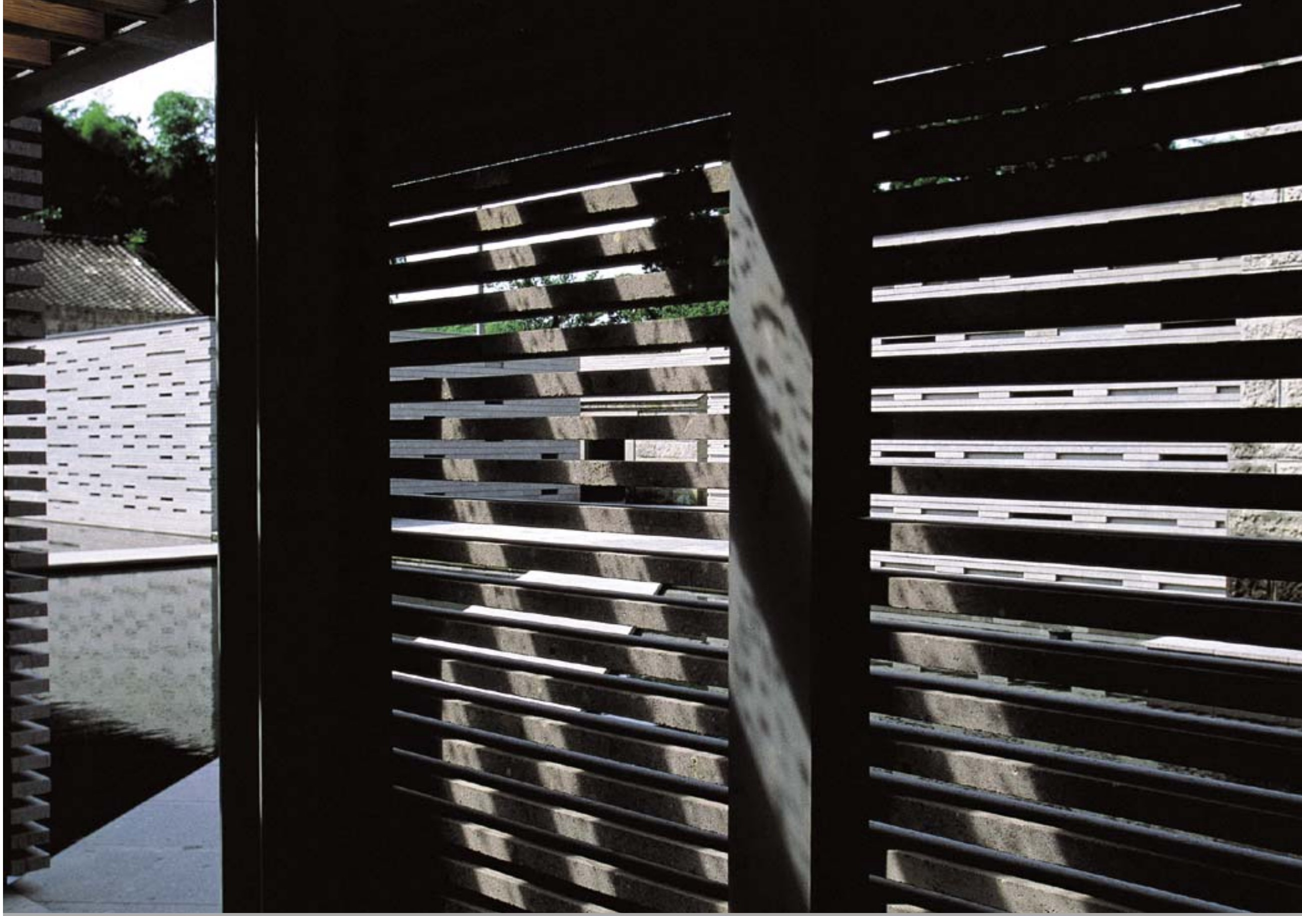
The other type of wall consists of a porous arrangement of stone blocks cut to dimensions of 1.9 by 11.75 by 35.25 inches (50 by 300 by 900 mm). These blocks were placed so as to create numerous gaps at random locations, up to the structural limitations of layered stone walls. Some of these small gaps were filled with thin white marble plates that filter in soft light contrasting with the direct sunlight penetrating through the clear openings—an effect that is not unlike that at the Yale University Library of 1963 (designed by Gordon Bunshaft of Skidmore, Owings, and Merrill).

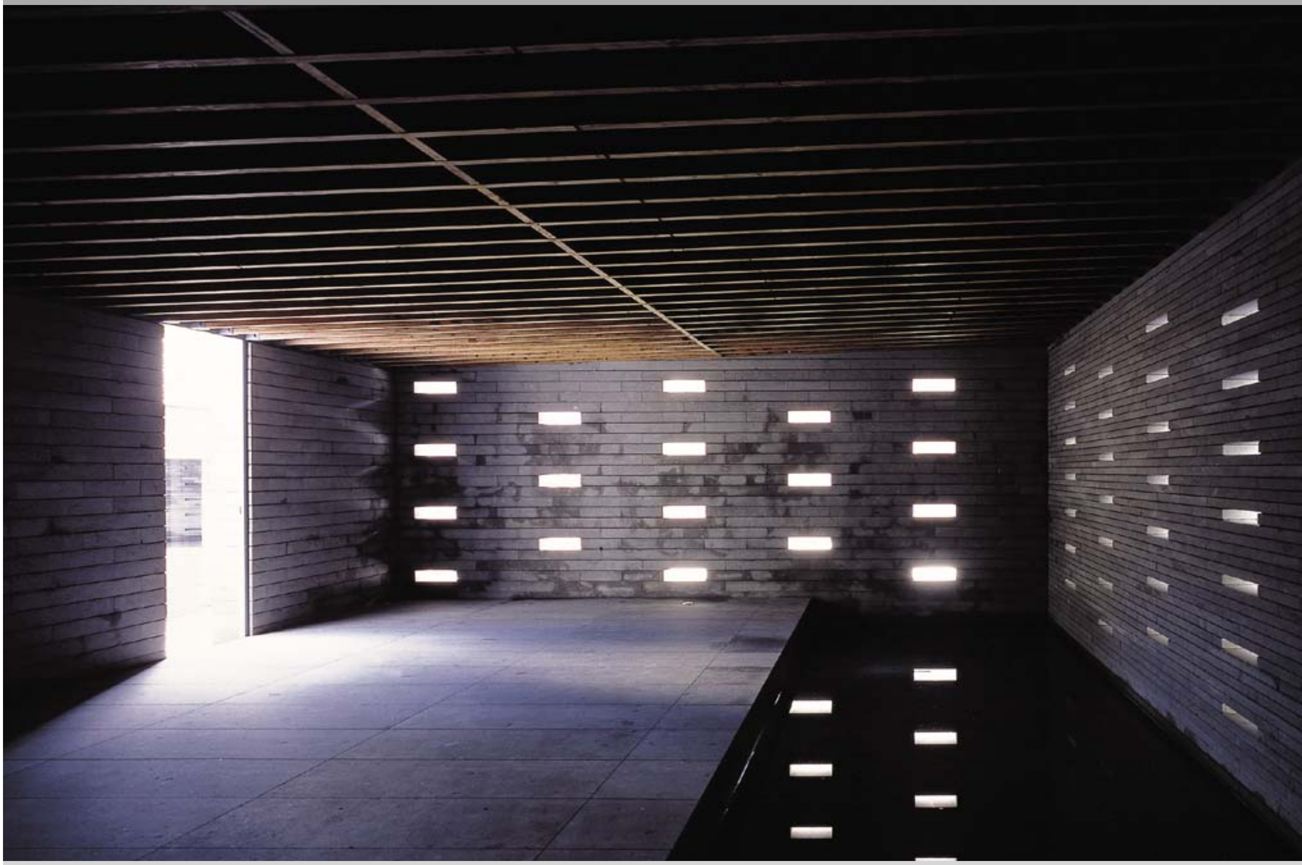
Kuma’s stone walls with their delicate permeability compose a system of ambiguous site boundaries as the light filtering in divides them into infinite particles.



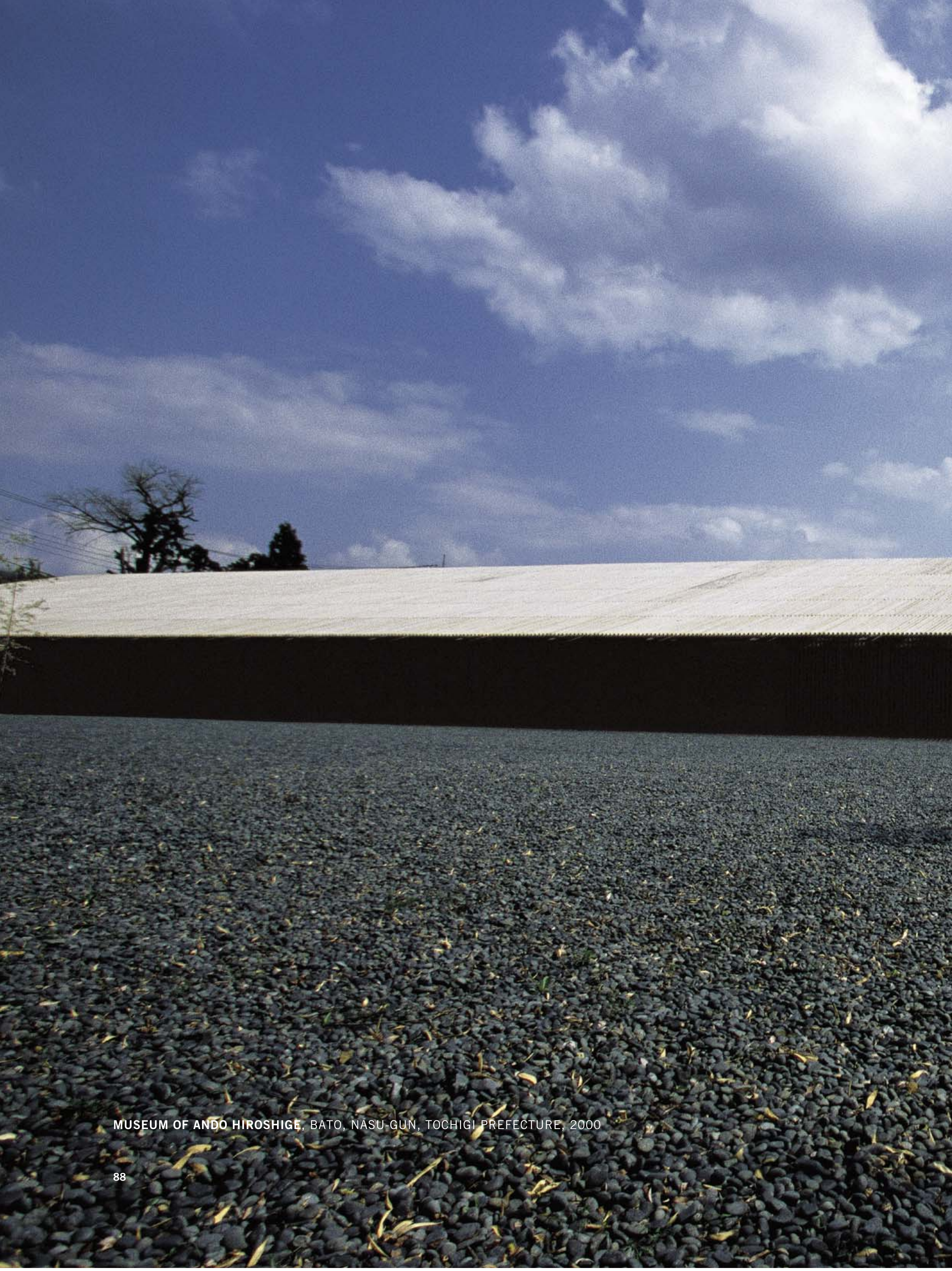


PREVIOUS PAGES / VIEW FROM THE STREET
TOP / NIGHT VIEW OF COURTYARD
BOTTOM / VIEW OF COURTYARD FROM MAIN GALLERY

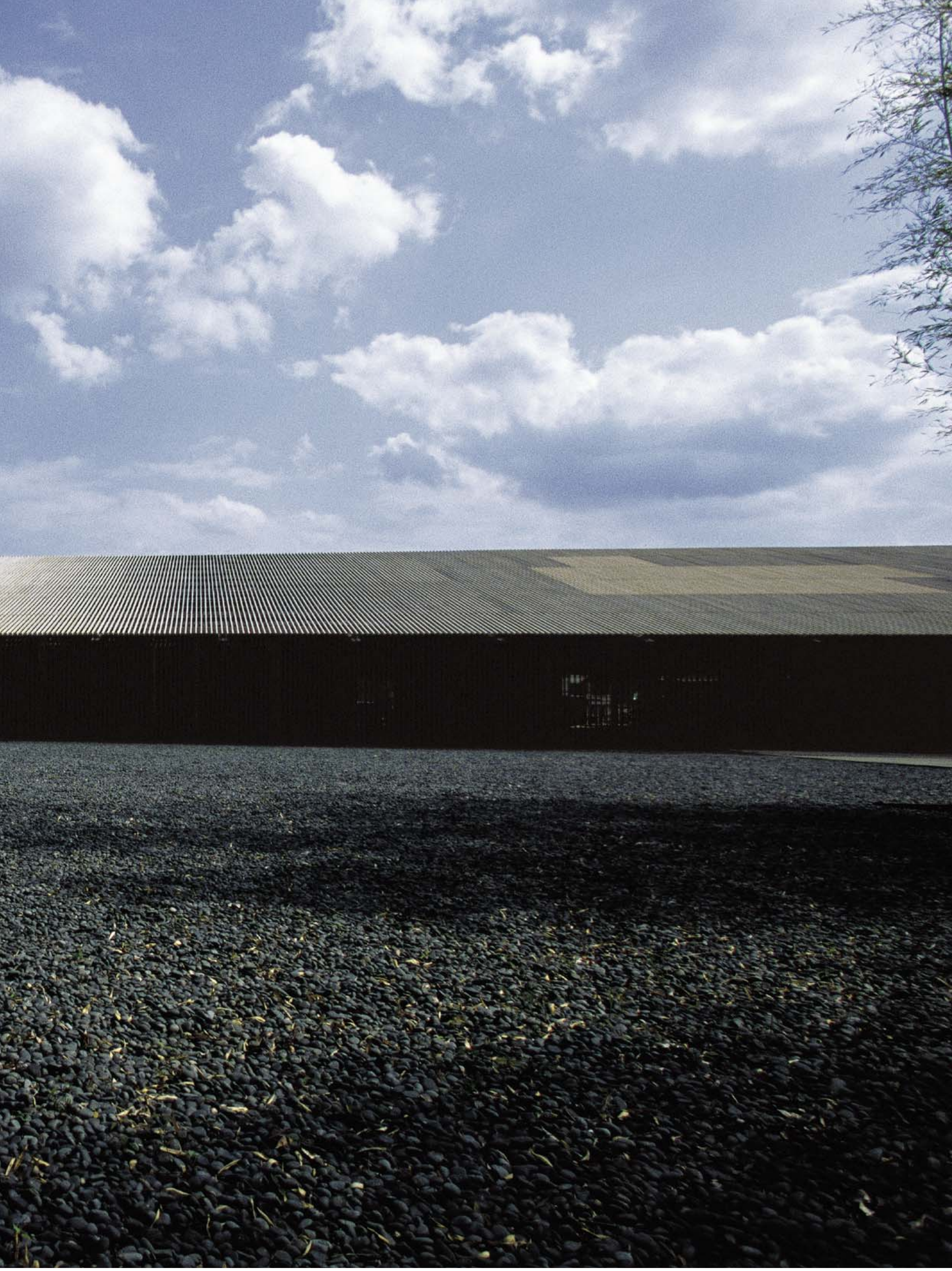


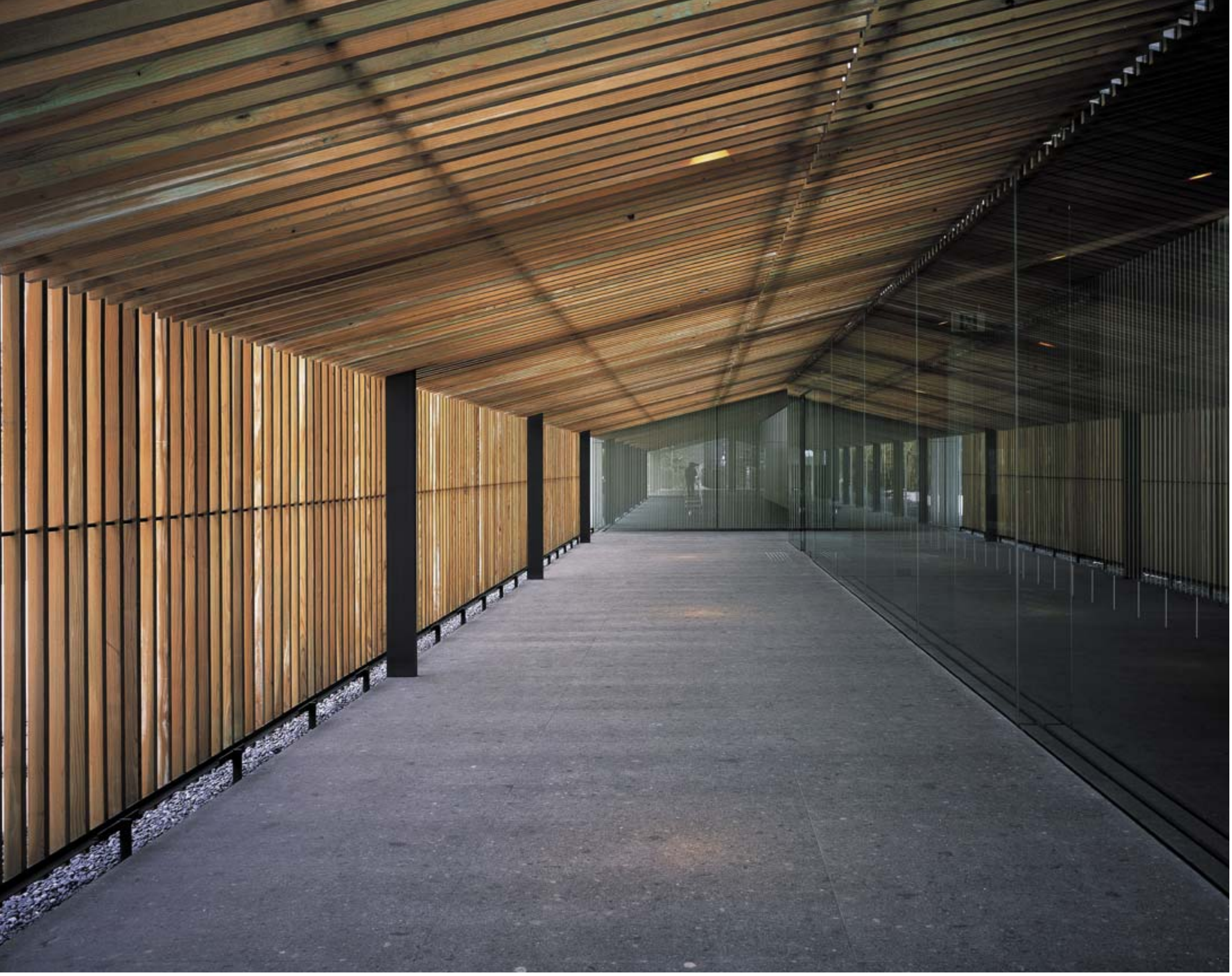


TOP / VIEW FROM THE LIBRARY THROUGH STONE SLATS
BOTTOM / INTERIOR VIEW OF SMALLER GALLERY



MUSEUM OF ANDO HIROSHIGE, BATO, NASU-GUN, TOCHIGI PREFECTURE, 2000



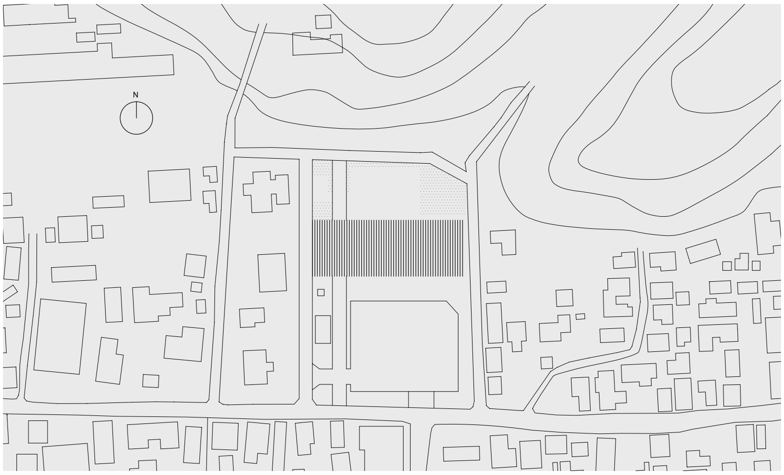


Ando Hiroshige (1797–1858) is one of the best-known artists in the history of Japanese woodblock printing, or *ukiyoe* painting. After the Hansin Earthquake of 1995, many original pieces of his work were discovered in the ruins and eventually donated to the city of Bato in Tochigi Prefecture. The museum housing Hiroshige's prints is a simple, long building of steel and glass with a pitched roof. The entire structure is wrapped by layers of wooden screens.

These densely spaced slats help to render the boundaries of the building transparent, translucent, or opaque, depending on the position or movement of the observer and the changing light that filters into the space. By virtue of this wooden grill, the building thus alters its essence, oscillating between presence and virtual absence. Additional elements further enhance the experience of the ephemeral in Kuma's architecture: glass and several plastic membranes interact with the vibrant texture of the wooden screens, reflecting and filtering views both inside and out.

The sequence of movement through the building emphasizes the magical ambience of blurred boundaries between inside and outside and between the real and the virtual. Particularly impressive is the approach to the entrance, which brings visitors to a covered but otherwise open passage under the building. At its end a green bamboo grove can be seen beyond the gravelled court behind the museum. From this passage one enters a small café (also composed of glass and wooden screens) or the museum itself.

Hiroshige's *ukiyoe* prints are characterized by his visualization of changes in nature, capturing the shifting phenomena of light, wind, rain, and fog in a vivid combination of colors. Kuma in this project has applied Hiroshige's fundamental approach to art with and within the vocabulary of architecture; by designing the museum as a system of wooden grids, he has succeeded in creating a building that acts as a sensor of light. The museum can be rightly considered as one of his most impressive works.



OPPOSITE
ENTRANCE TO EXHIBITION AREA

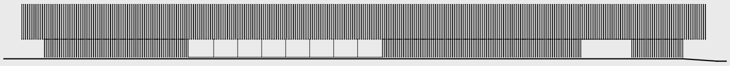
TOP
SITE PLAN

MIDDLE
ELEVATIONS

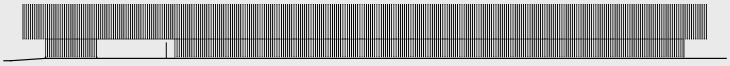
BOTTOM
FLOOR PLAN

FOLLOWING SPREAD LEFT
VIEW OF OPEN ENTRANCE PASSAGE

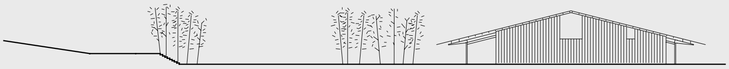
FOLLOWING SPREAD RIGHT
DETAIL OF NORTH ELEVATION



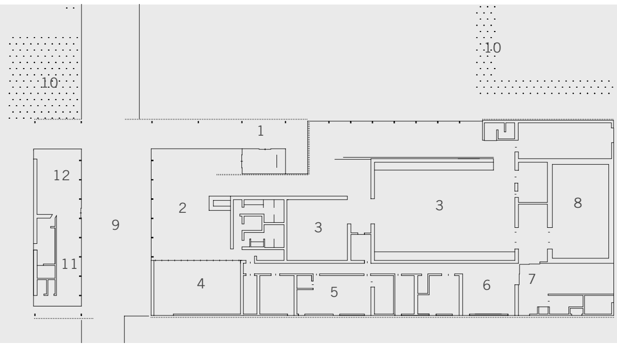
NORTH ELEVATION



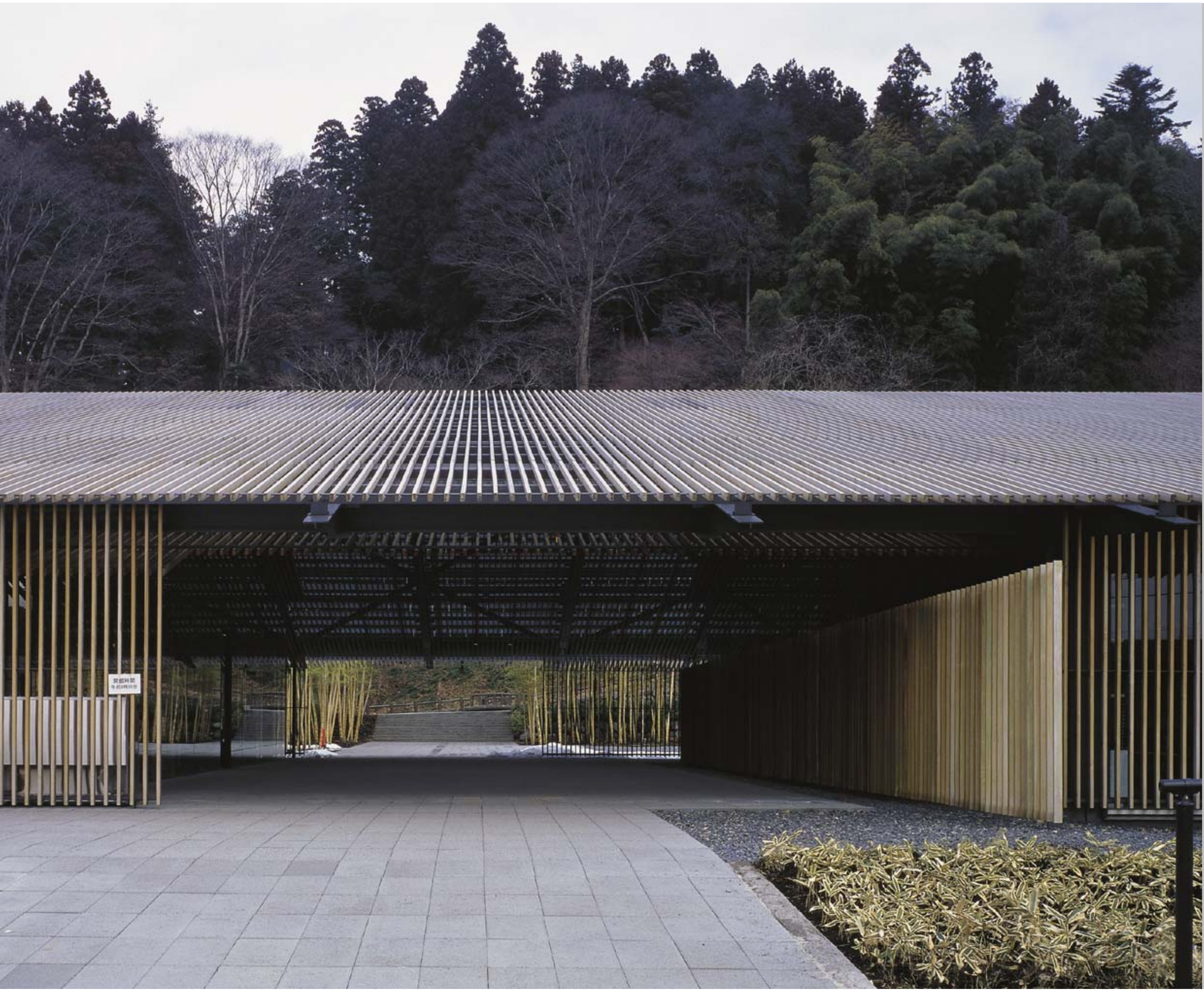
SOUTH ELEVATION

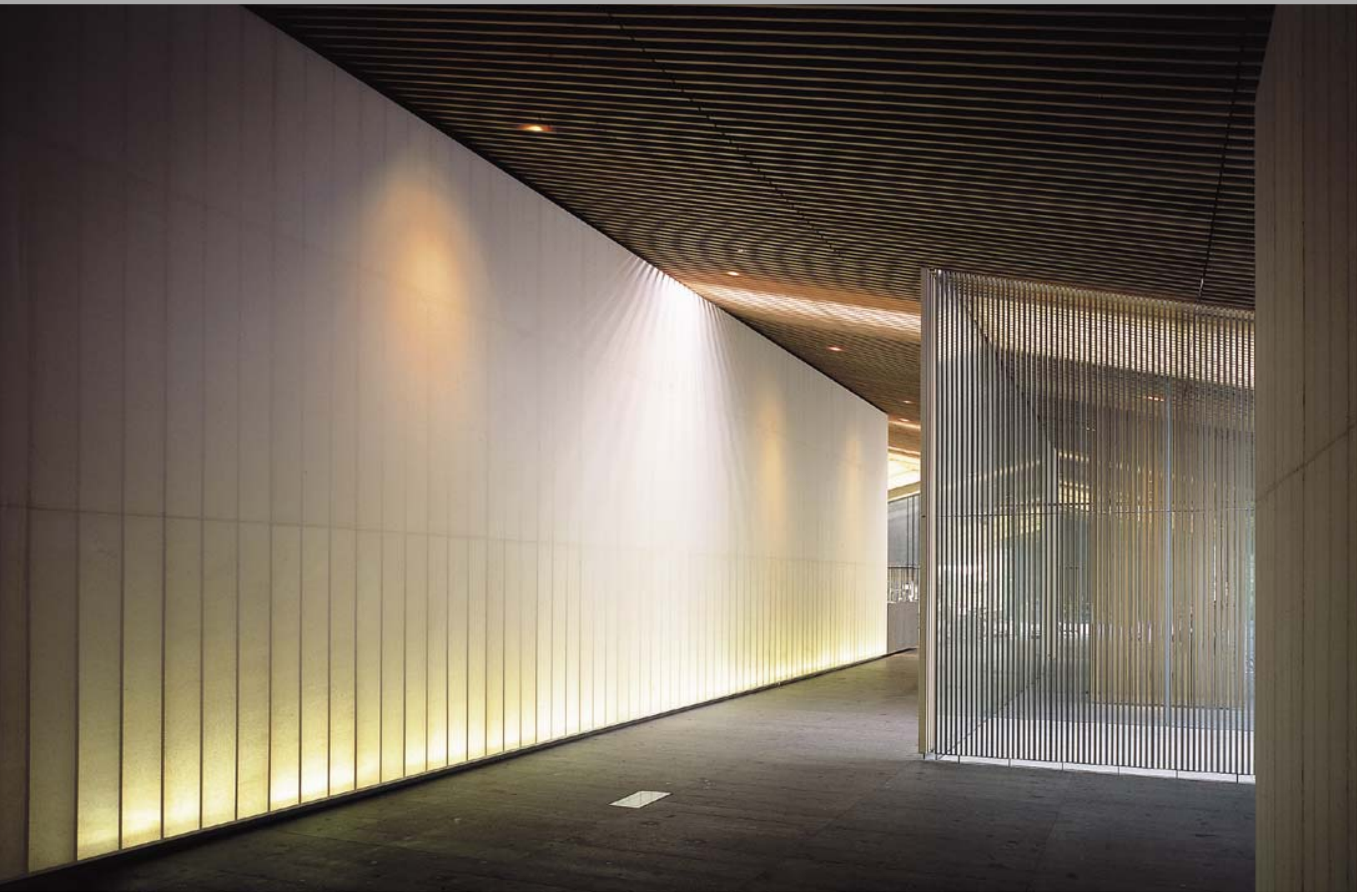


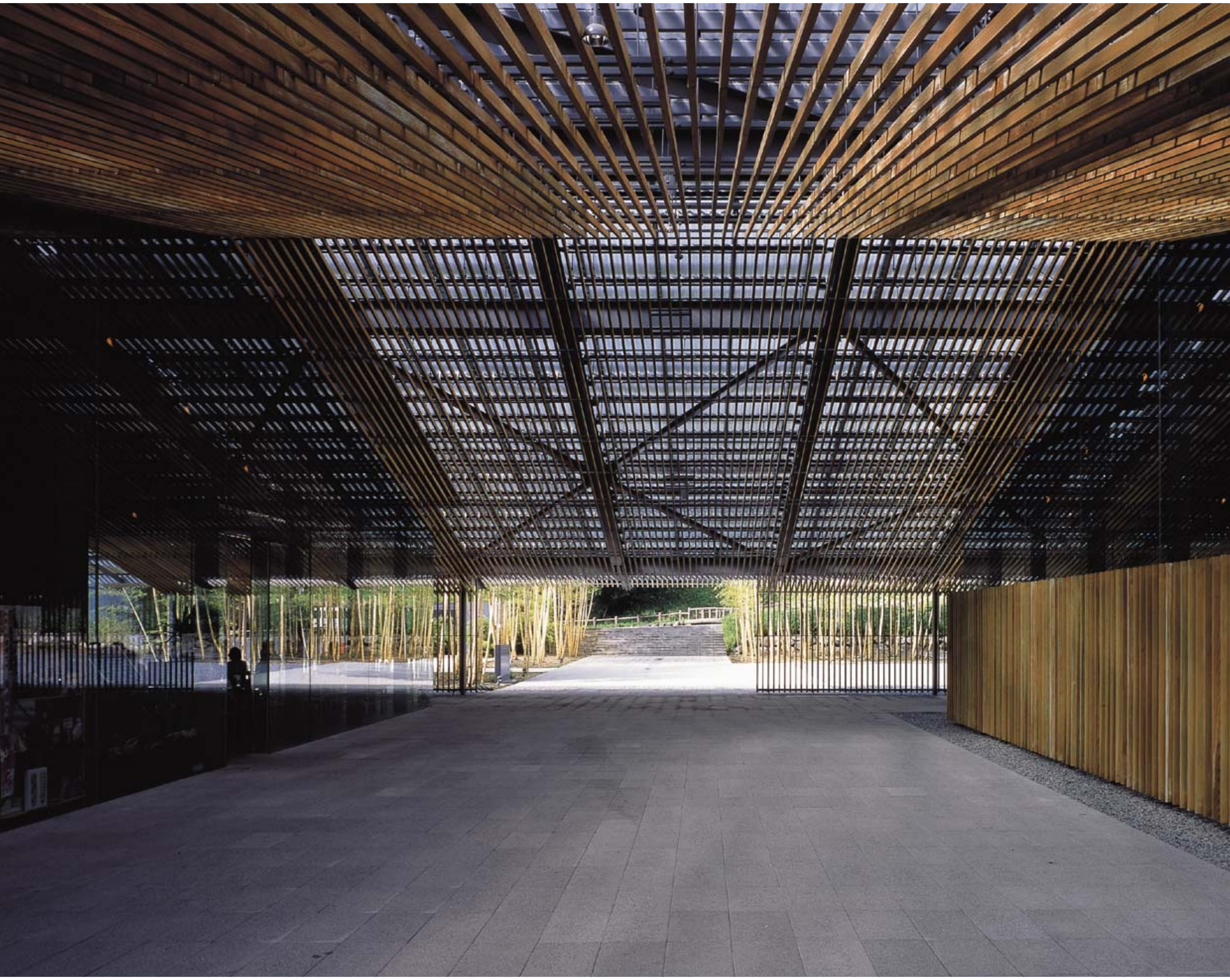
WEST ELEVATION



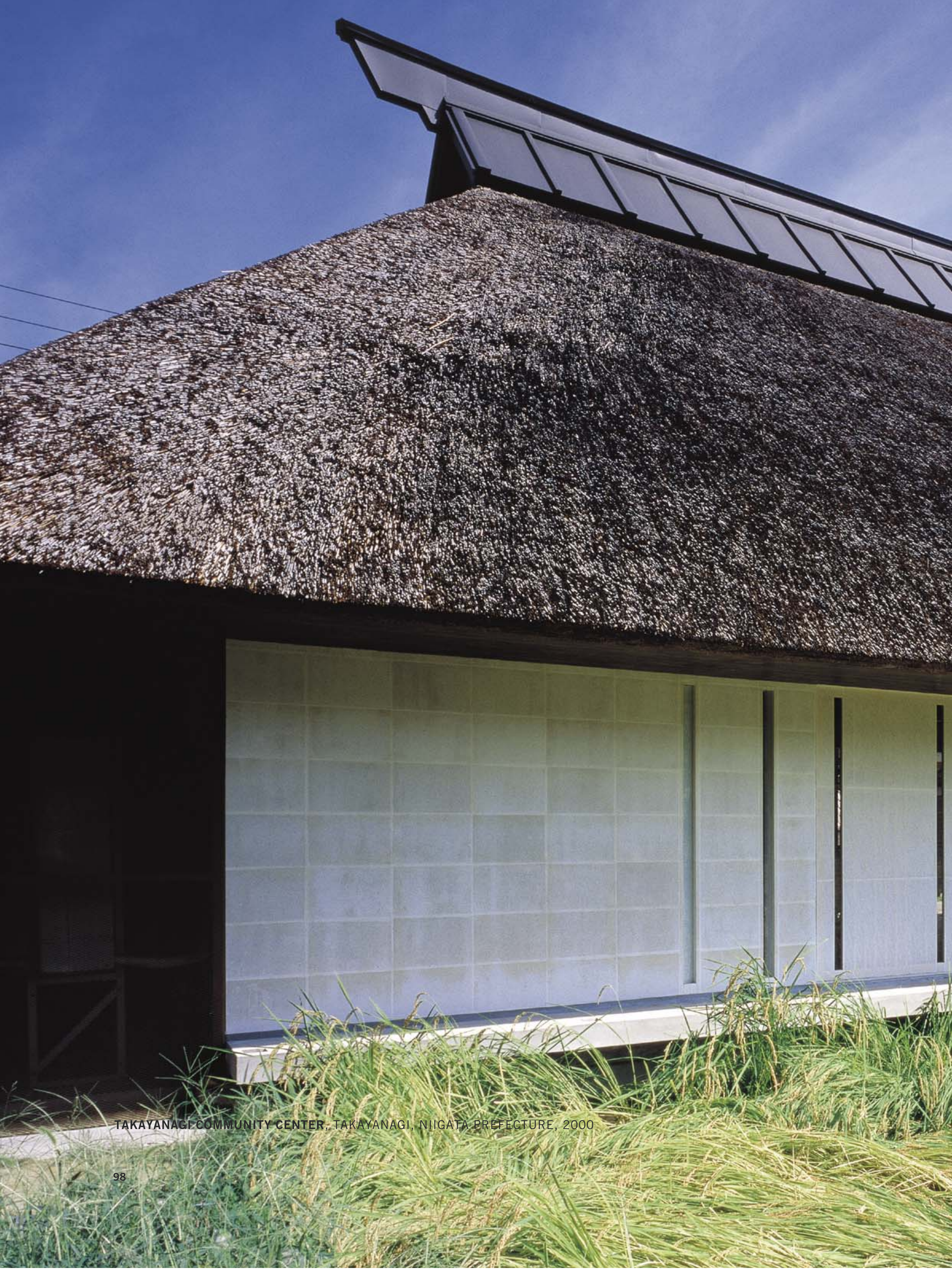
1 / ENTRANCE
2 / ENTRANCE HALL
3 / EXHIBITION ROOM
4 / AUDIOVISUAL ROOM
5 / OFFICE
6 / EXHIBITION PREPARATION ROOM
7 / LOADING SPACE
8 / STORAGE
9 / OUTDOOR PASSAGE
10 / BAMBOO
11 / SHOP
12 / RESTAURANT



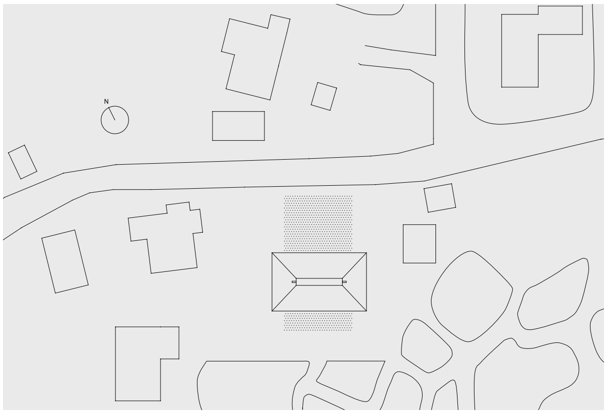




PREVIOUS PAGES / NORTH ELEVATION WITH BAMBOO GROVE IN BACKGROUND
OPPOSITE TOP / VIEW OF ENTRANCE FROM EXHIBITION AREA
OPPOSITE BOTTOM / PASSAGE FROM ENTRANCE HALL TO EXHIBITION ROOMS
ABOVE / VIEW THROUGH OPEN ENTRANCE PASSAGE



TAKAYANAGI COMMUNITY CENTER, TAKAYANAGI, NIIGATA PREFECTURE, 2000



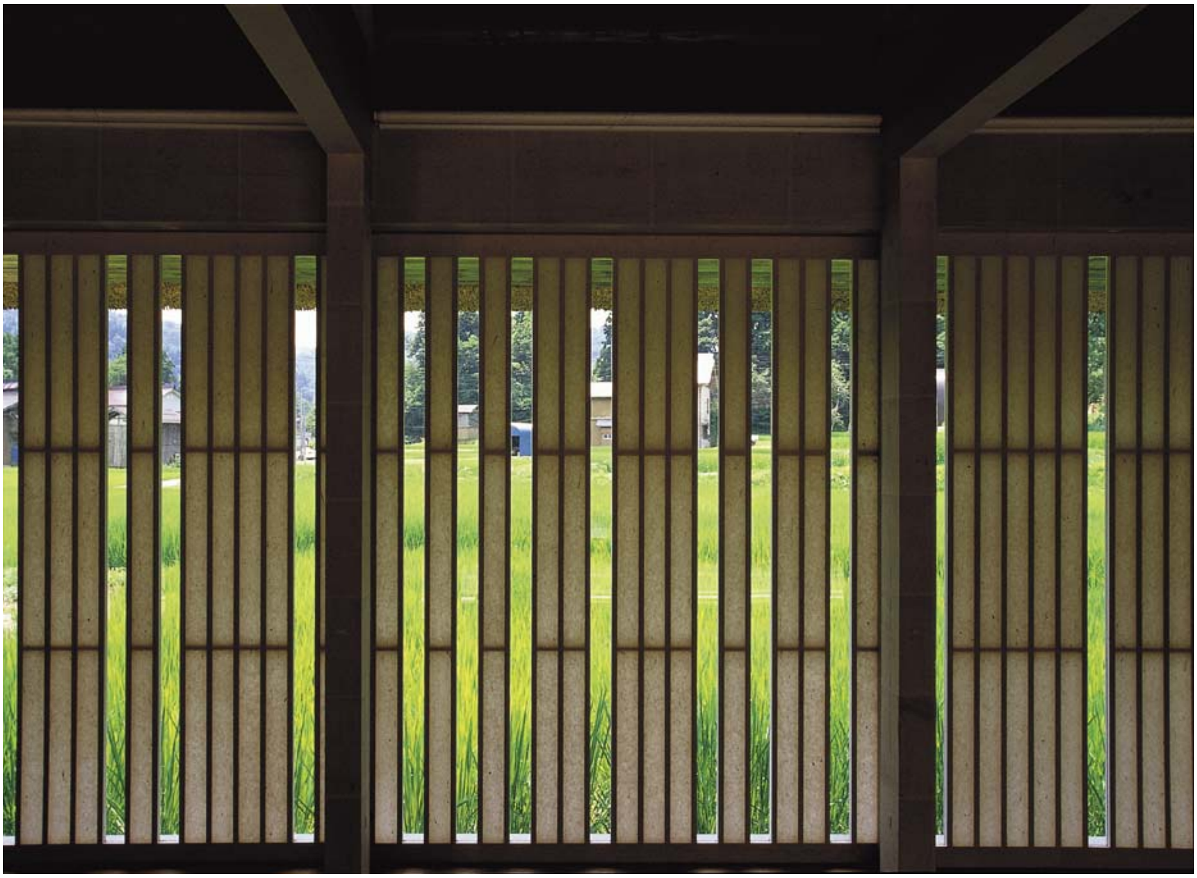
TOP
SITE PLAN

BOTTOM
VIEW FROM INSIDE

OPPOSITE TOP
NIGHT VIEW

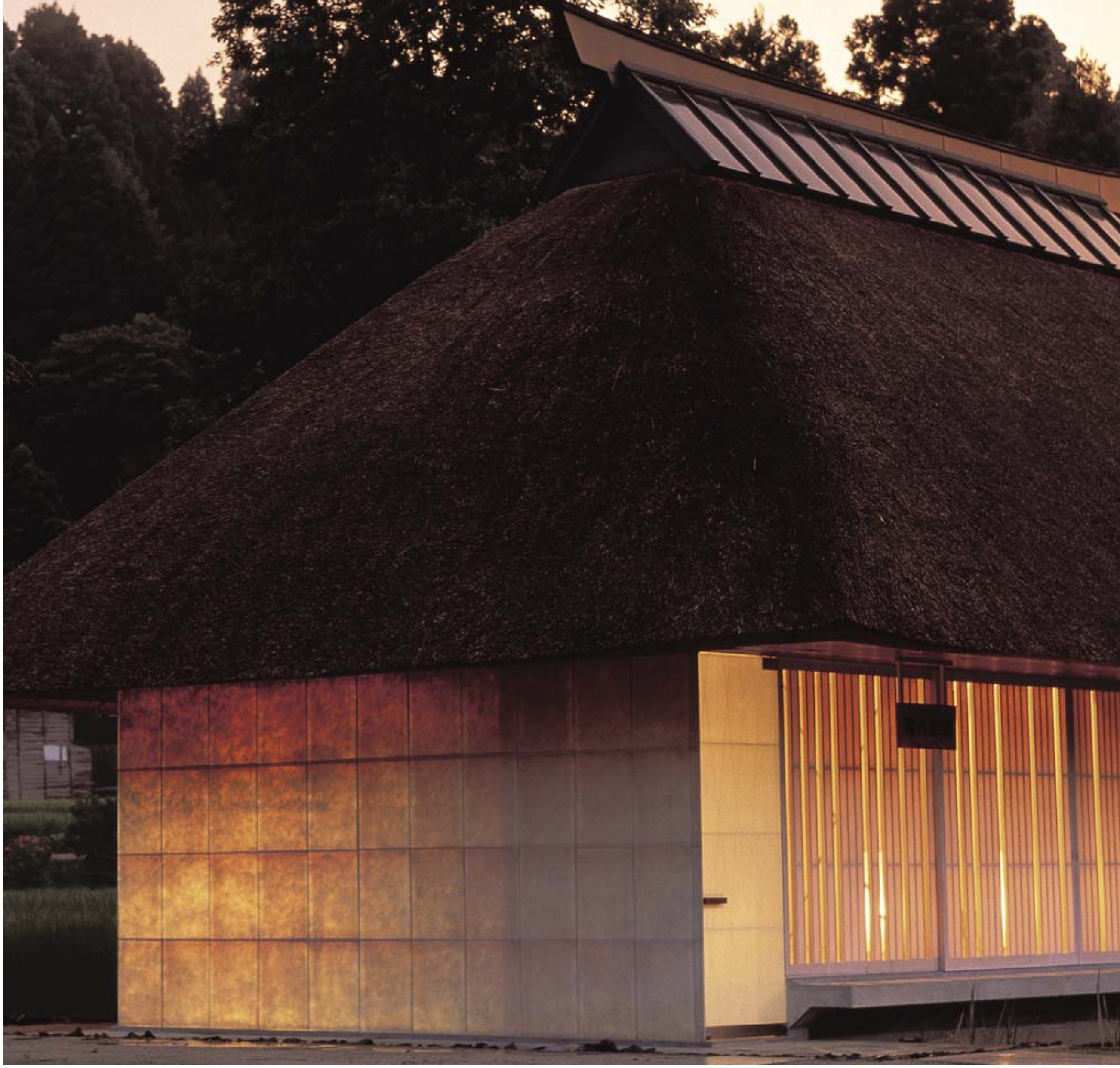
OPPOSITE BOTTOM LEFT
FLOOR PLAN

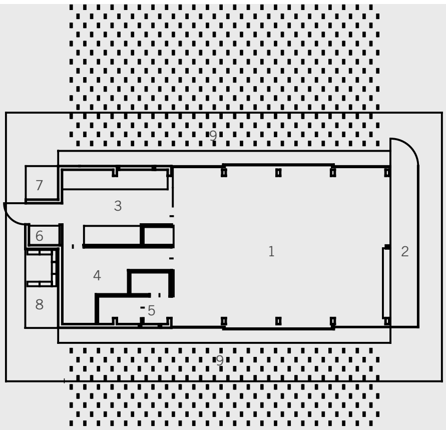
OPPOSITE BOTTOM RIGHT
SECTION AND ELEVATIONS



This facility was built in the center of a village laid out according to a circular plan. Made up of thatch-roof country houses (*minka*), Takayanagi is located in a region of Niigata Prefecture known for heavy snowfall. In many ways the design of the community center borrows elements from the country houses that surround it, but Kuma redefined these elements by using contemporary construction techniques and new materials for his building. While the majority of the structure is made of wood, and the roof is covered with thatch, Kuma applied diagonal post-tensioned synthetic tendons as structural means as well as Styrofoam insulation. The interior is separated from the exterior with sheets of locally manufactured Japanese paper (*Kadode-washi*), used in place of glass or window-sash. Kuma also used this paper to cover the floor and structural elements.

The small building serves various purposes for the rural community and, in addition to a larger meeting space, includes a kitchen, toilet, and storage facilities. One of the most impressive features of the meeting room is its open loft space, which reveals the wooden structural frame of the roof, covered with the softly textured white paper. With the community center, Kuma aimed at creating a cocoonlike space composed of Japanese paper.

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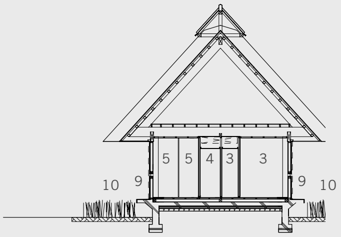
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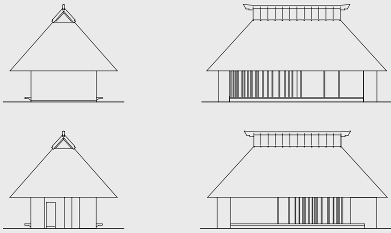
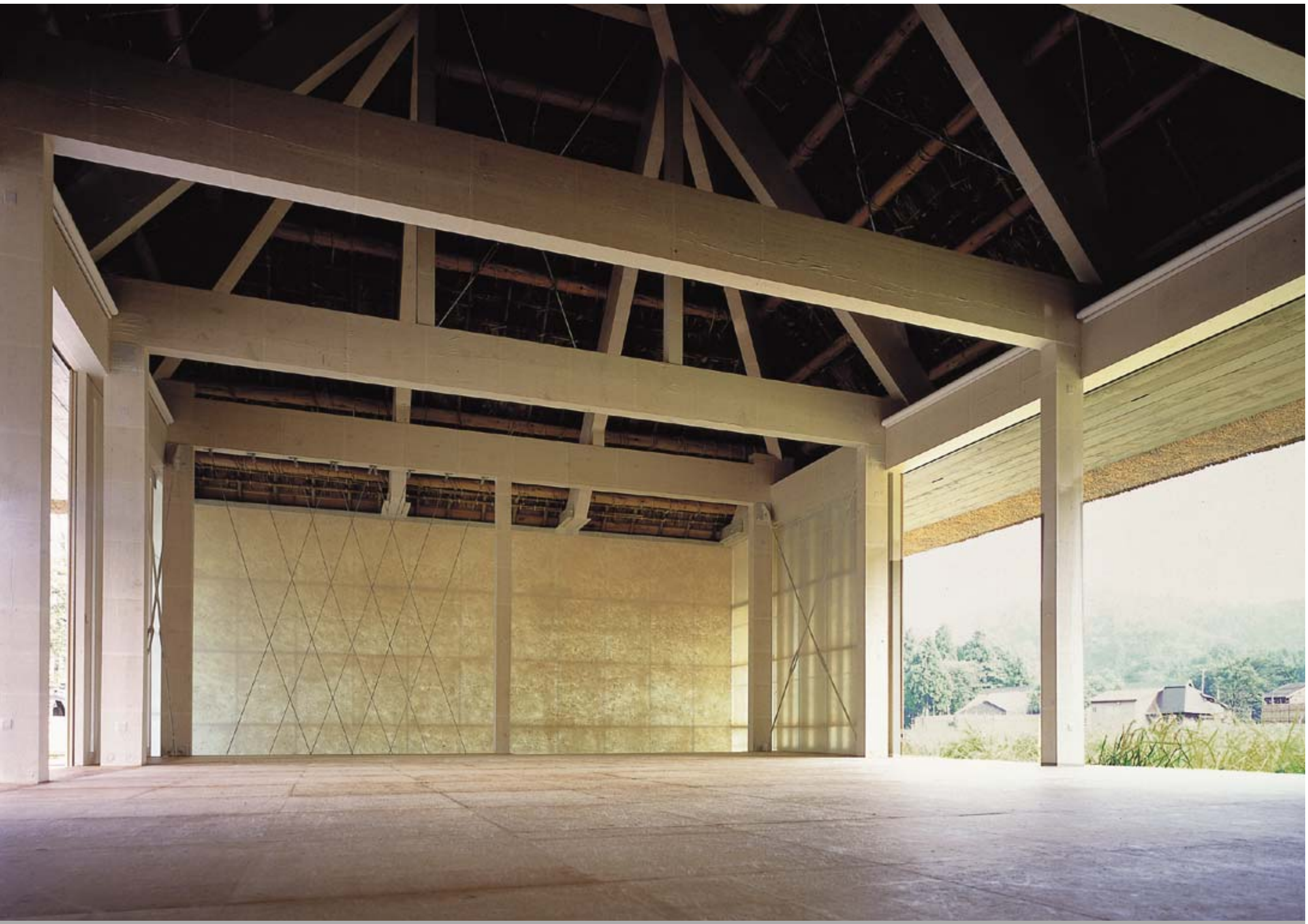
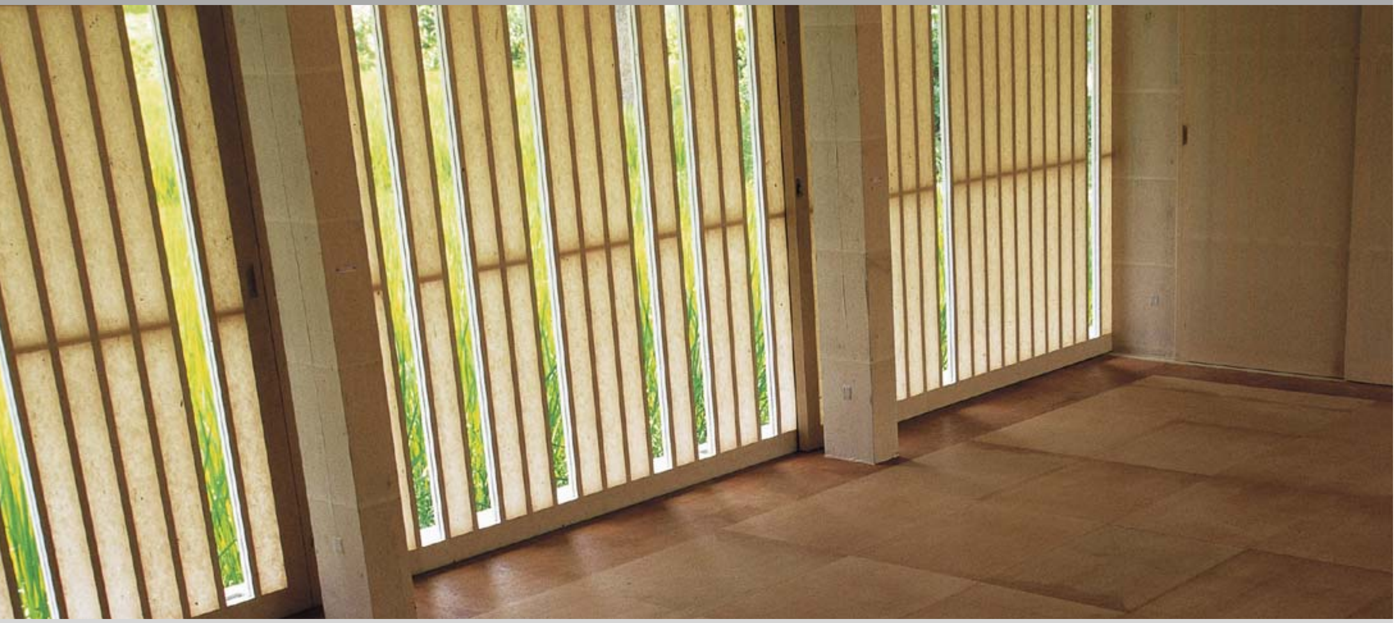
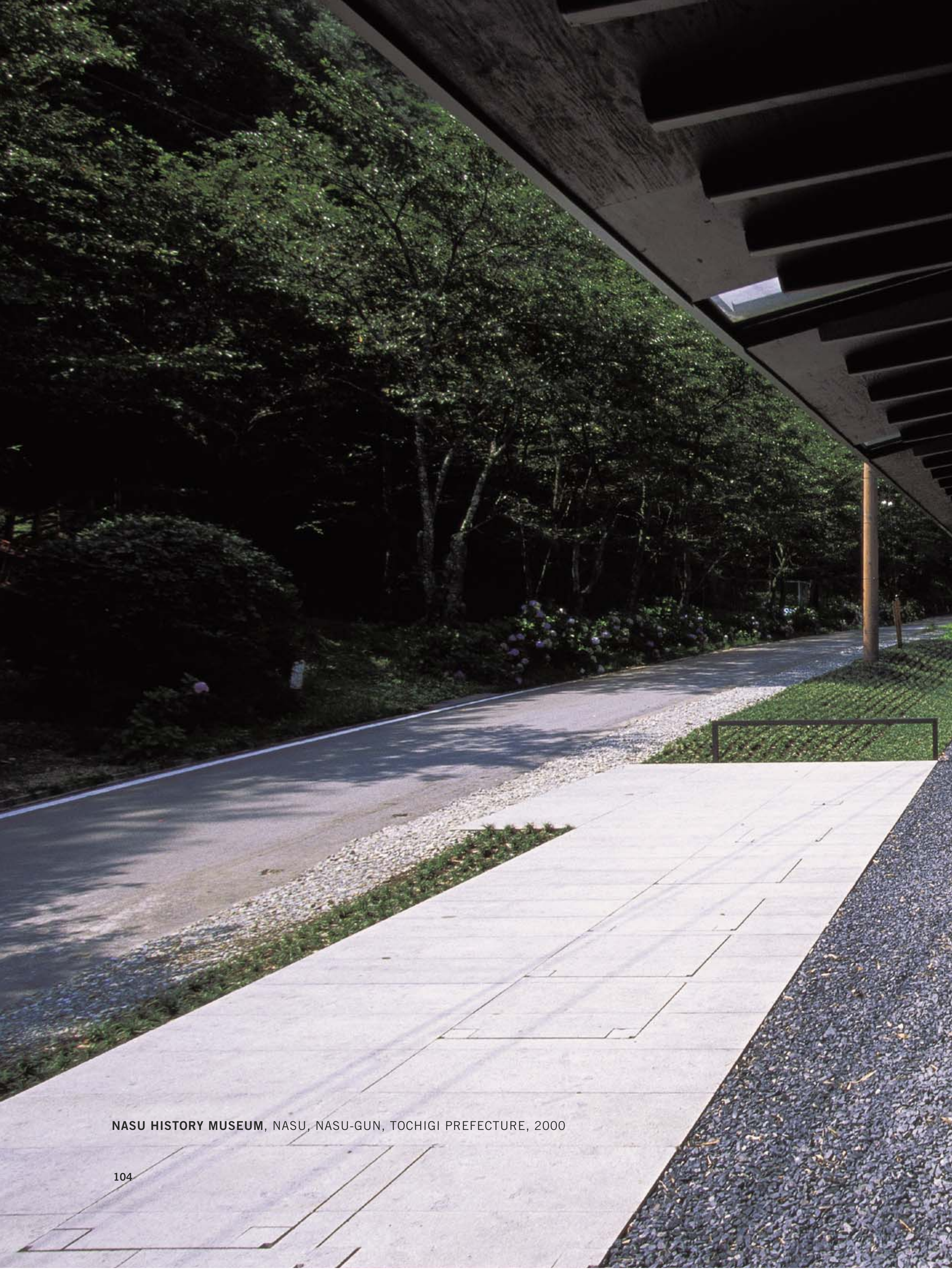


1 / MEETING SPACE
2 / EARTH FLOOR
3 / KITCHEN
4 / STORAGE
5 / BATH ROOM
6 / BACK DOOR
7 / STORAGE
8 / MECHANICAL SPACE
9 / OUTER CORRIDOR
10 / RICE FIELD

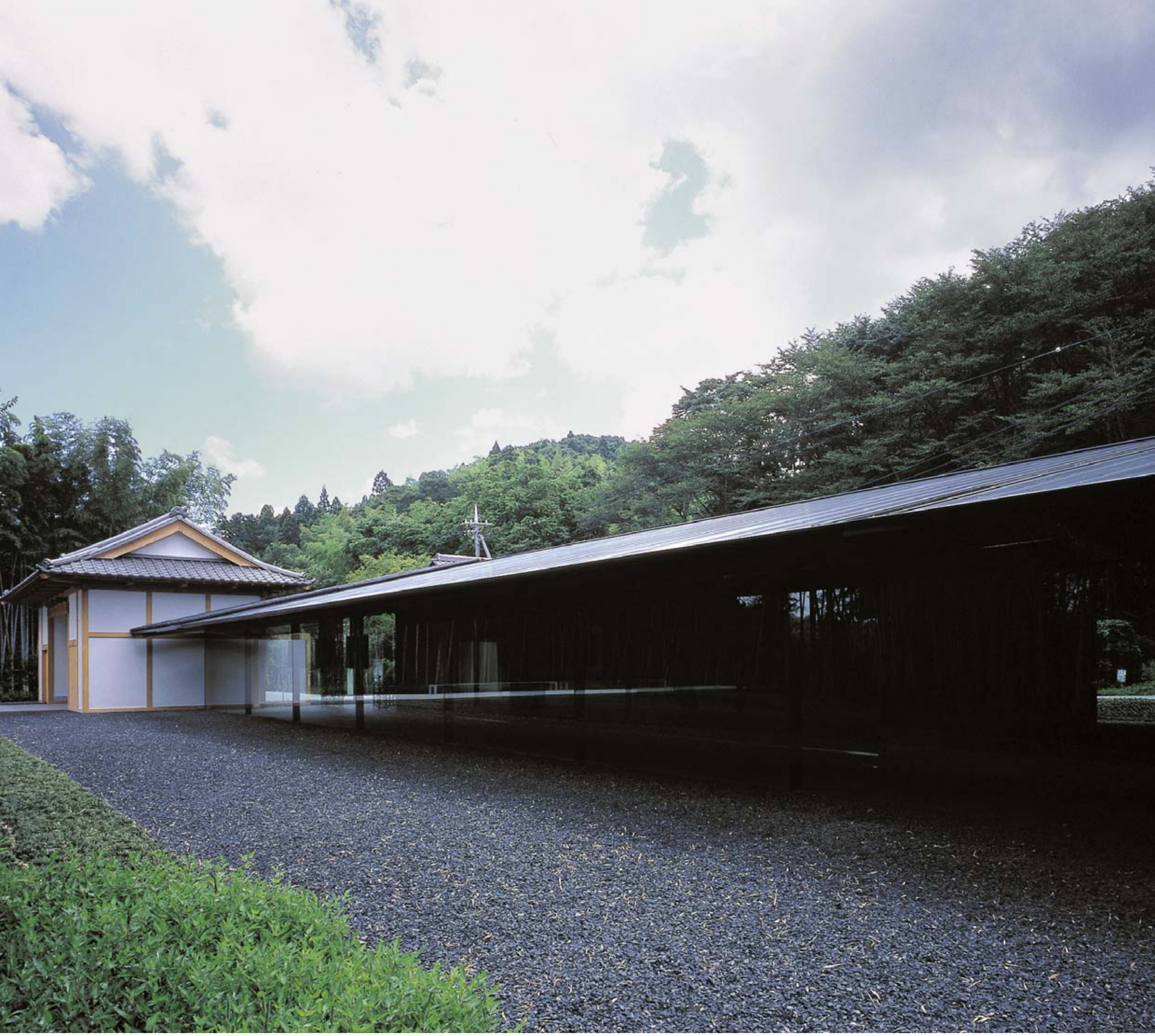




TOP / INTERIOR VIEW
BOTTOM / DETAIL OF EXTERIOR WALL
OPPOSITE / VIEW OF EXTERIOR WITH RICE FIELDS

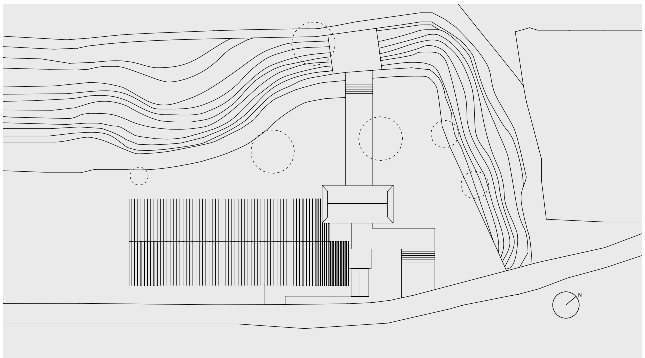


NASU HISTORY MUSEUM, NASU, NASU-GUN, TOCHIGI PREFECTURE, 2000



The Nasu History Museum is located in Ashino, a historic outpost along the main road during the Edo era (1600–1868), which the famous traveling Zen poet Matsuo Basho (1644–1694) immortalized in his haiku diary *Oku-no-hoso-michi* (The Narrow Road to the Deep North). The museum was established to tell the rich history of the town of Nasu; its site contains a variety of historic elements, including a restored gate, an old storehouse, and a stone column from an earlier elementary school. To tie these items together, Kuma enclosed them in a simple, long, transparent glass building.

On the inside of the glass walls are semi-transparent sliding panels made of straw and aluminum mesh, visually separating the building from the garden and making it possible to control exterior light in a variety of ways. In addition, partitions made of vines collected from the hills behind the museum are positioned at strategic locations. Effectively combining a transparent spatial arrangement with natural materials—as Kuma did with this project—is known as the *sukiya* spirit in Japanese building design. Such design evokes an atmosphere of lightness and airiness, which is at the heart of traditional Japanese architecture.

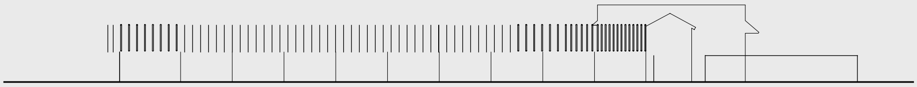


OPPOSITE
EXTERIOR VIEW

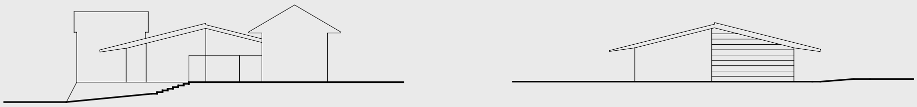
TOP
SITE PLAN

MIDDLE
ELEVATIONS AND FLOOR PLAN

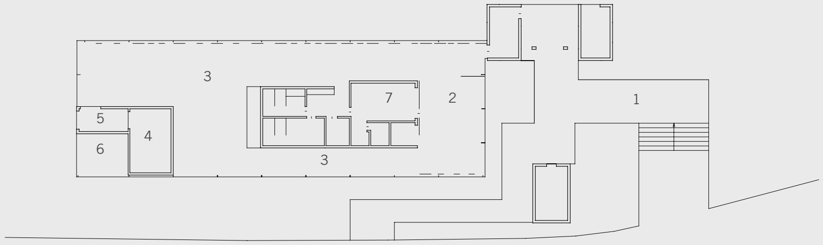
BOTTOM
SECTION

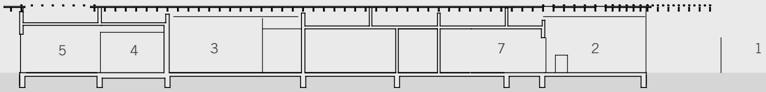


SOUTH ELEVATION



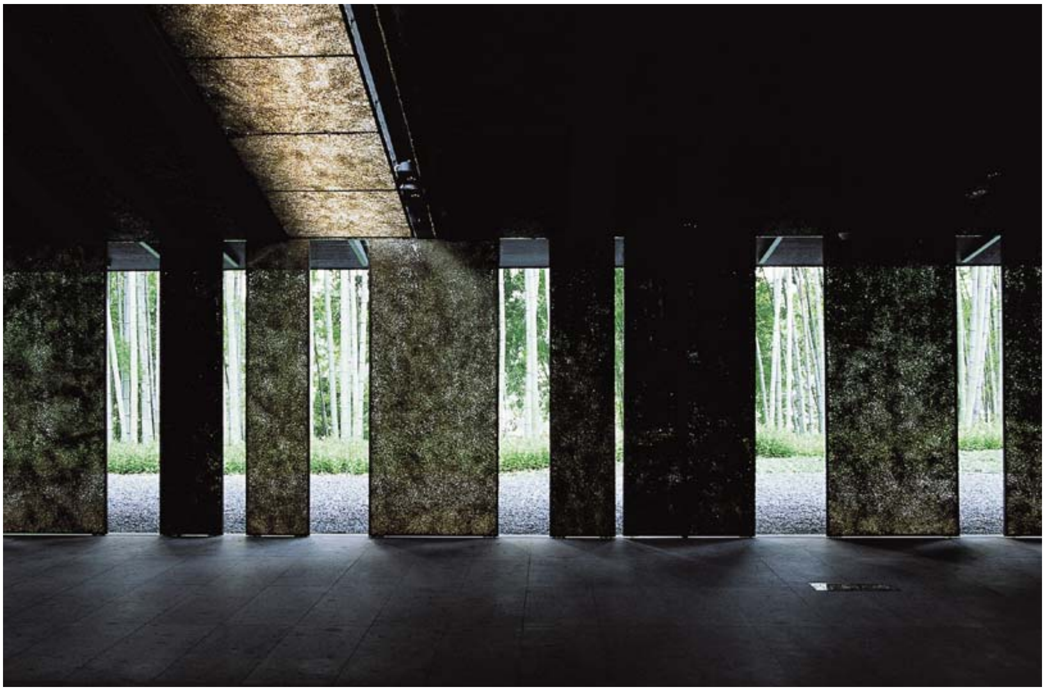
WEST ELEVATION

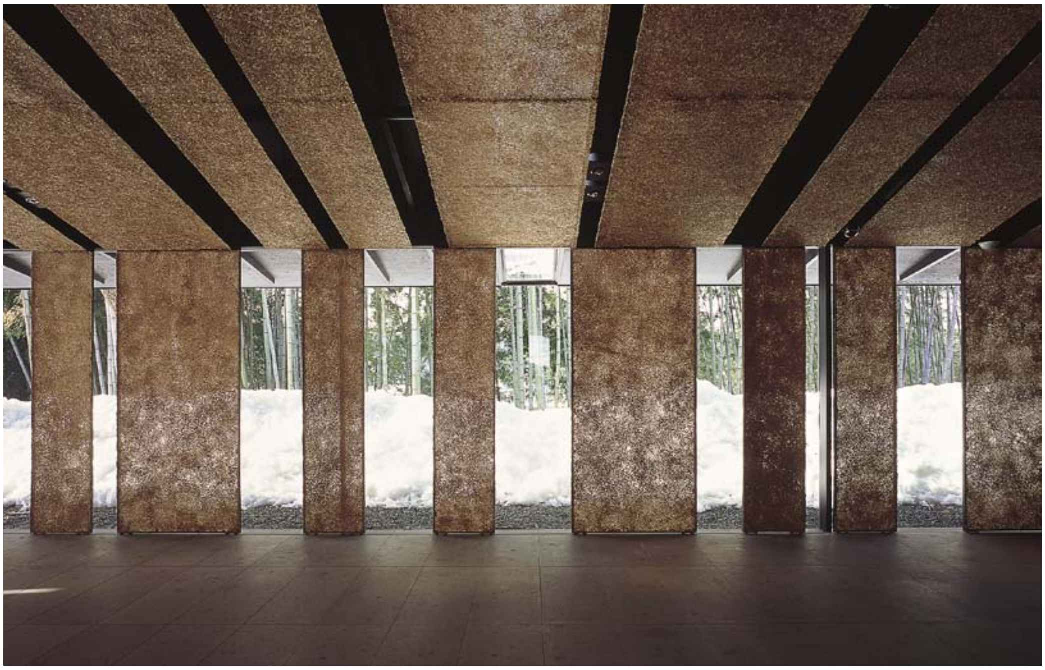




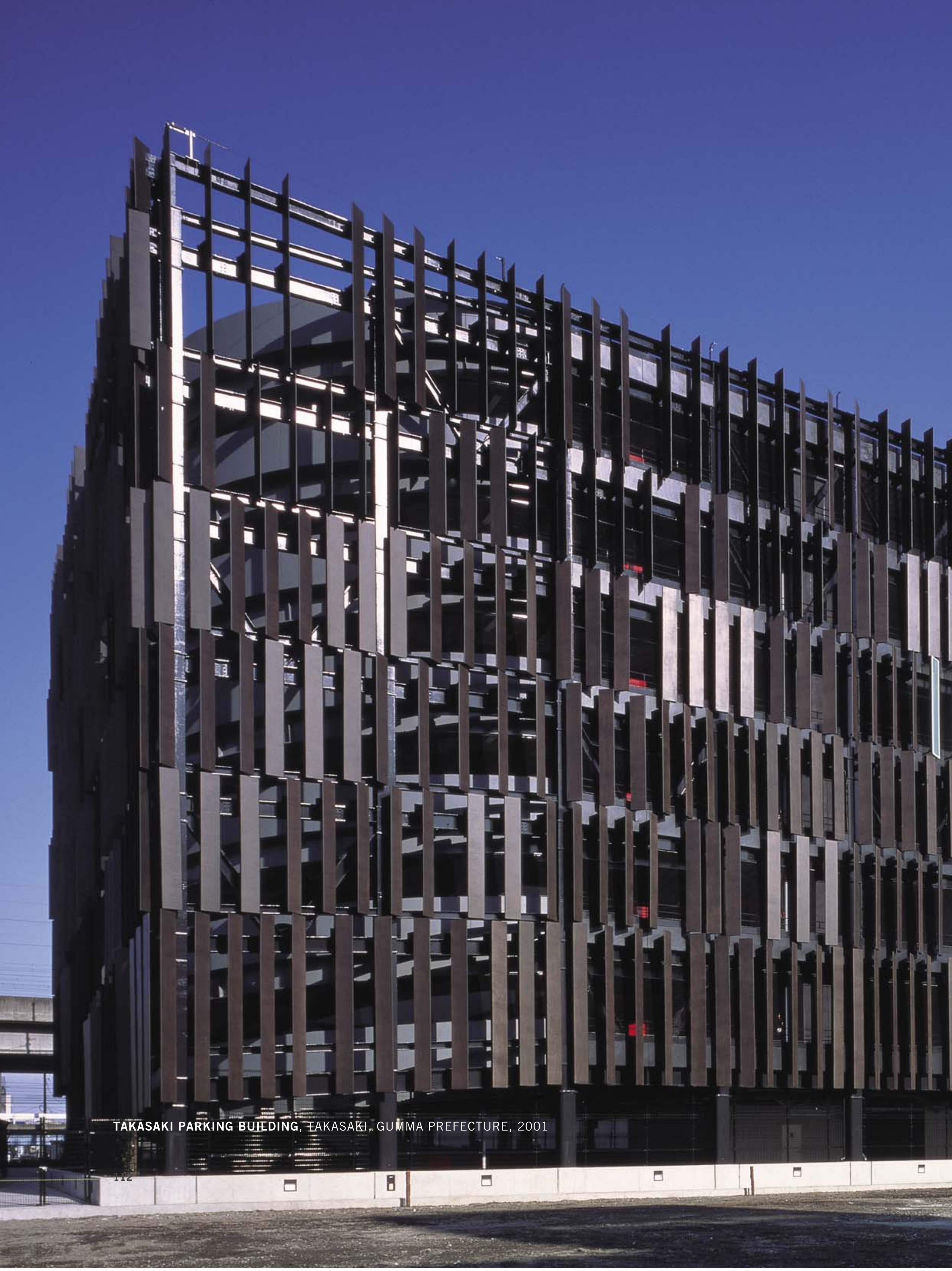
1 / APPROACH
2 / ENTRANCE HALL
3 / EXHIBITION SPACE
4 / ARCHIVE
5 / LOADING SPACE
6 / MECHANICAL SPACE
7 / OFFICE

OPPOSITE / VIEW OF EXHIBITION SPACE
TOP / EXTERIOR DETAIL WITH OVERHANGING EAVE
BOTTOM / INTERIOR DETAIL

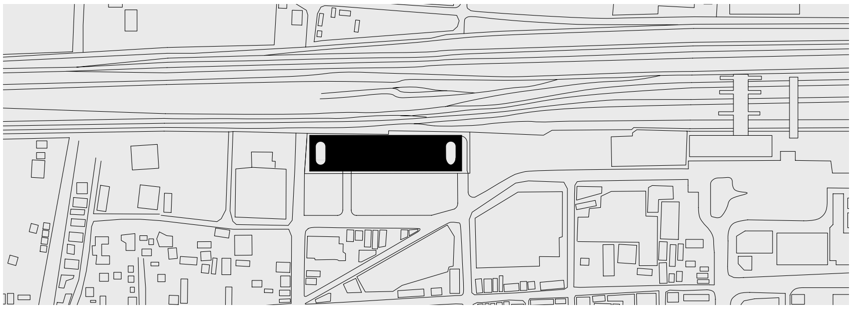


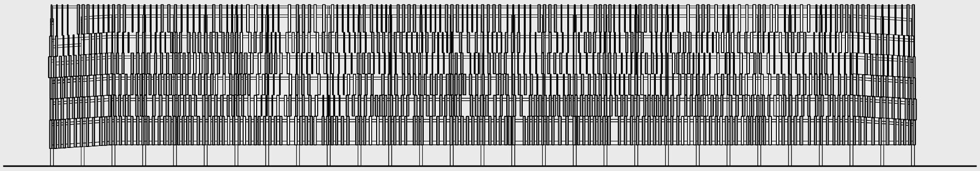


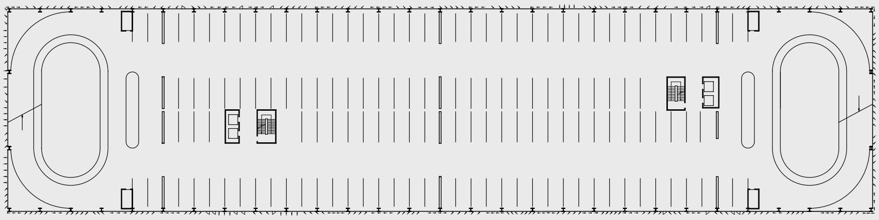
TOP / VIEW FROM INSIDE THROUGH SLIDING PANELS
BOTTOM / SAME VIEW IN WINTER
OPPOSITE / DETAIL OF ENTRANCE HALL SHOWING PARTITIONS MADE OF VINES



TAKASAKI PARKING BUILDING, TAKASAKI, GUMMA PREFECTURE, 2001







TOP
SITE PLAN

MIDDLE
ELEVATION

BOTTOM
TYPICAL FLOOR PLAN

OPPOSITE
ELEVATION DETAIL

A parking structure is a unique facility since, with its roadways and other aspects of construction, it is largely an engineering product, yet is considered a building. The Takasaki Parking Building, designed to accommodate as many as 1,000 cars, is 492 feet (150 meters) long and encompasses several miles of winding roadways. The long structure results in a large exterior that is of architectural concern, representing the modern-day duality of engineering and architecture, which is particularly evident in this urban context, a city that is extremely automobile-oriented.

Administrative regulations concerning the facility required the meeting of two conditions: to create a building that does not look like a parking lot and to adapt it to the prevailing color of Takasaki—the color of brick. Considering the location of the structure in front of Takasaki Station, which can be regarded as the gateway to the city, these demands might seem reasonable. Kuma, however, considered them worth challenging, as he feared that a compliance with such requirements might result in an uninspired approach to the design. Designing the parking facility to look exactly like a regular building—in the form of a box-shaped brick volume with small windows, for example—would have ignored the interesting duality of the facility.

The architect instead proposed attaching brown pre-cast concrete louvers, alternating with frosted glass louvers, to the outside of a steel frame. While the color of the louvers approximated the color of brick, the sense of openness achieved by the louver system emphasized the duality of the building. The choice of concrete and glass louvers and the specific angle at which each was installed were determined by the varying relationship between the interior and exterior and the specific location of the louvers. Where the louvers are exposed to the open sky, unobstructed by any building in front, they were installed perpendicular to the facade so as not to hamper outside views, while in the area of elevators and staircases, frosted glass louvers were used in order to let in diffused natural sunlight.

In addition to the varied design of the louver system, the unusual quality of the structure is further enhanced by the use of special details. The pre-stressed concrete louvers are covered with stainless steel mesh instead of ordinary steel covering, in order to visually increase their sharp angles and mask their massiveness. Glass louvers, on the other hand, are secured into place by translucent silicon gaskets instead of regular window sashes. The louvers thus look even less like ordinary structural elements.

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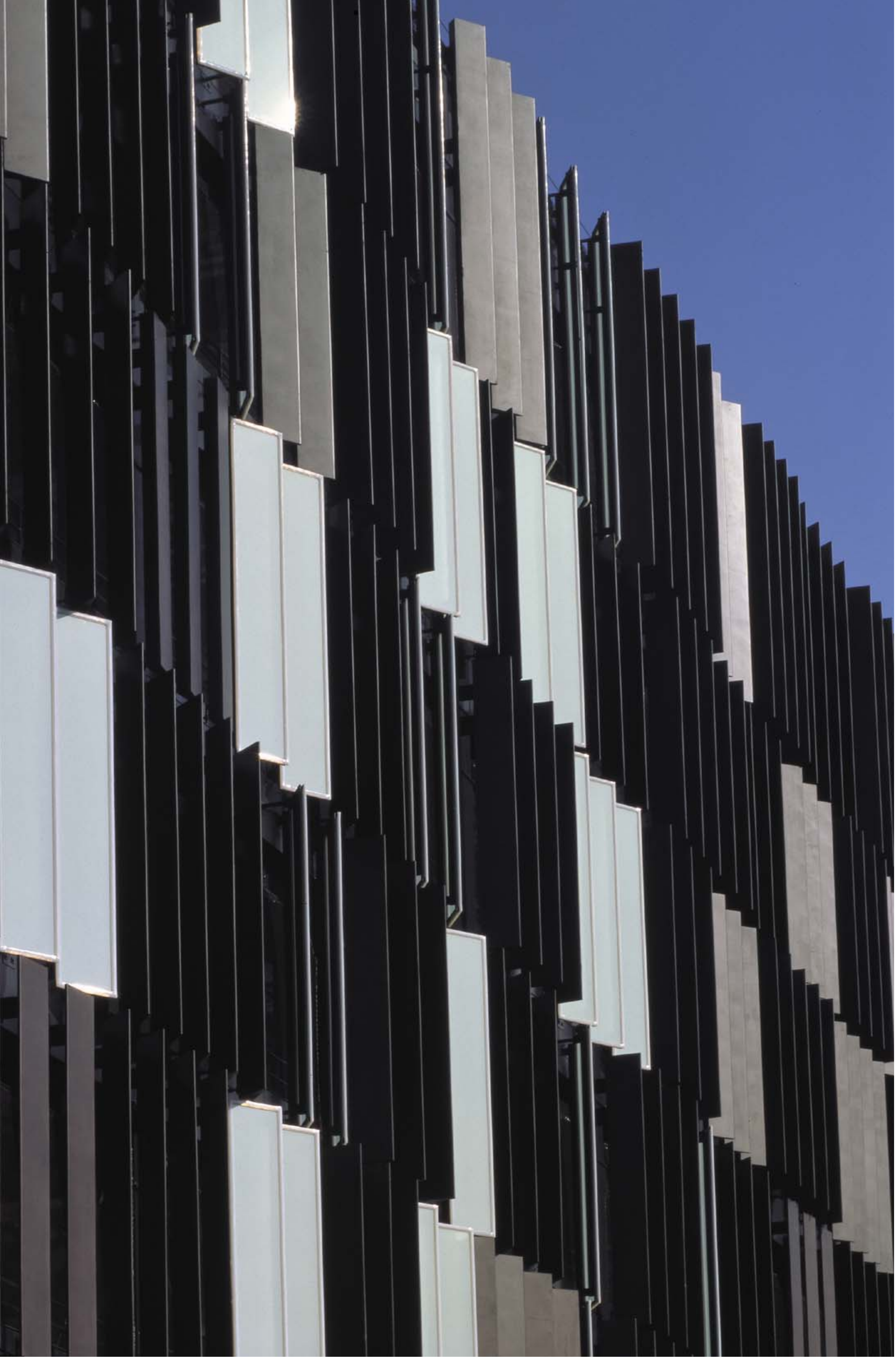
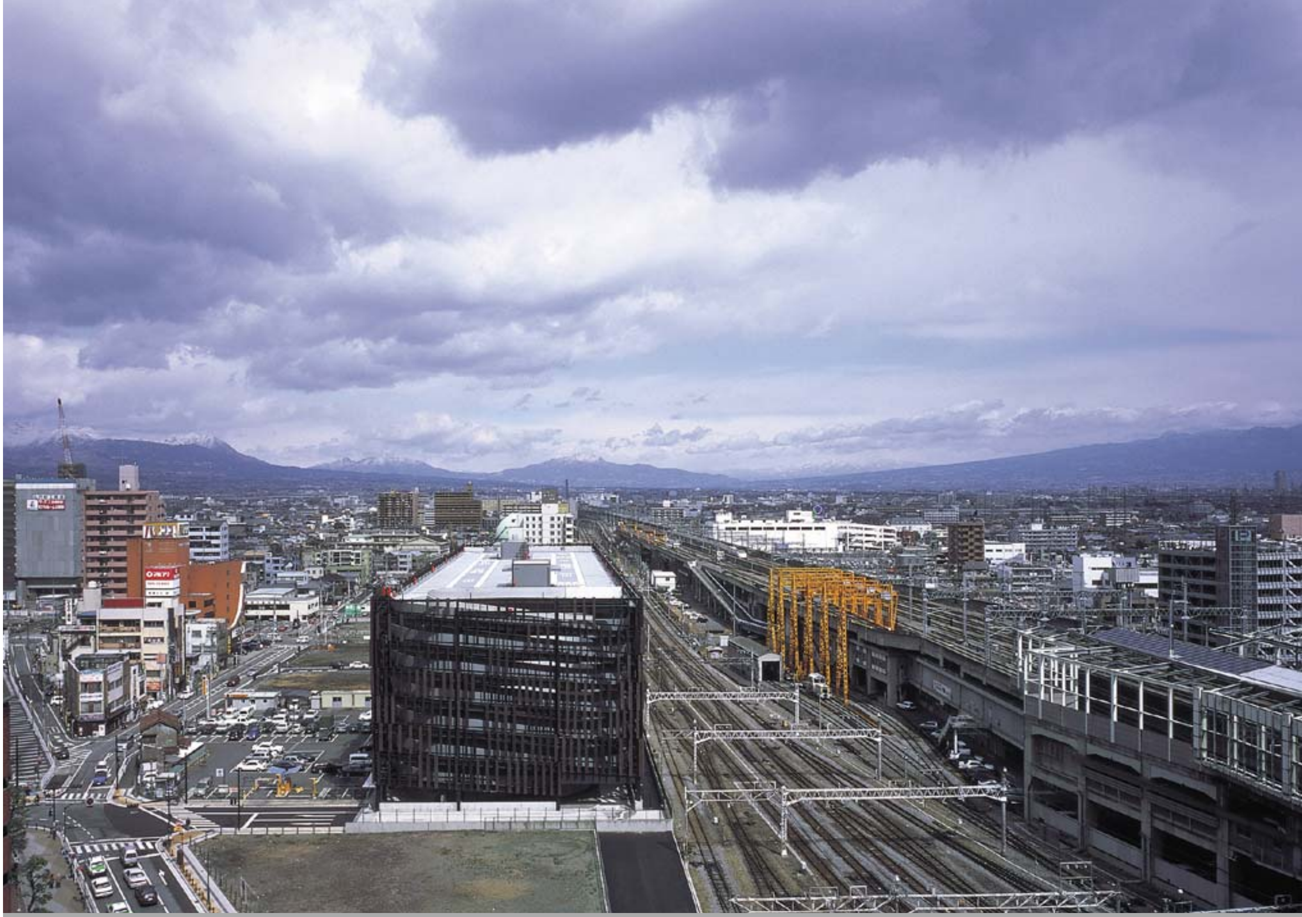
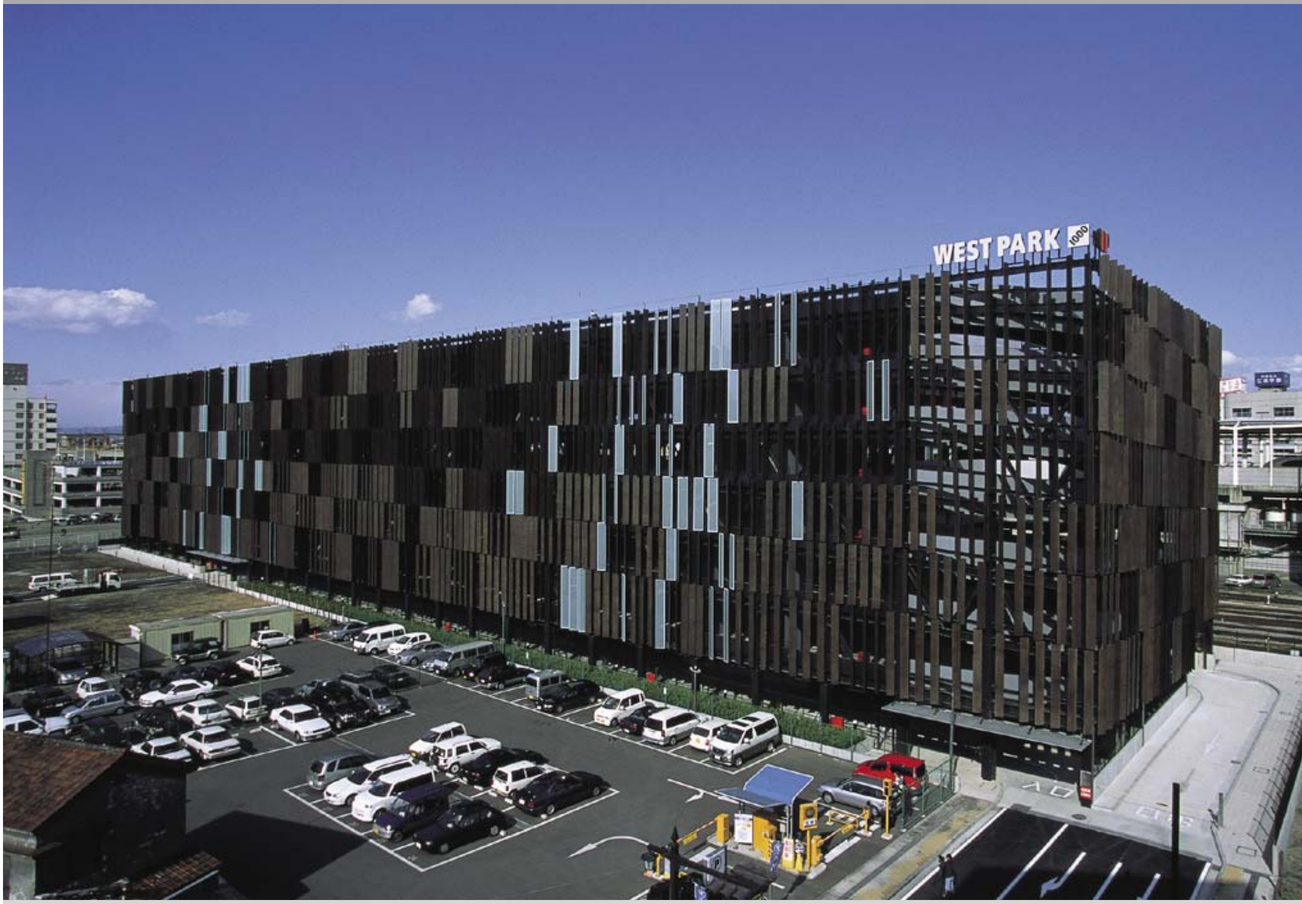
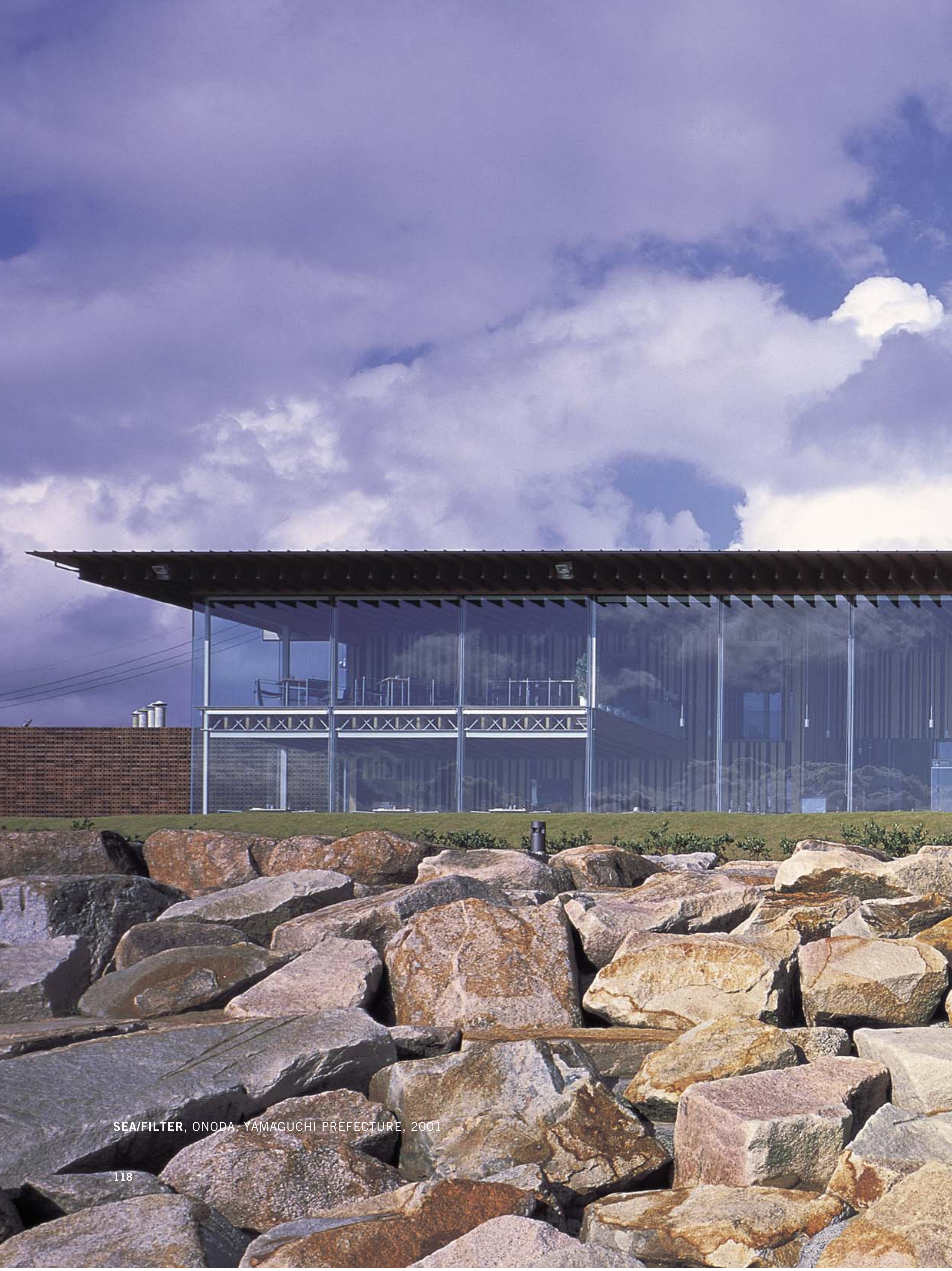
A



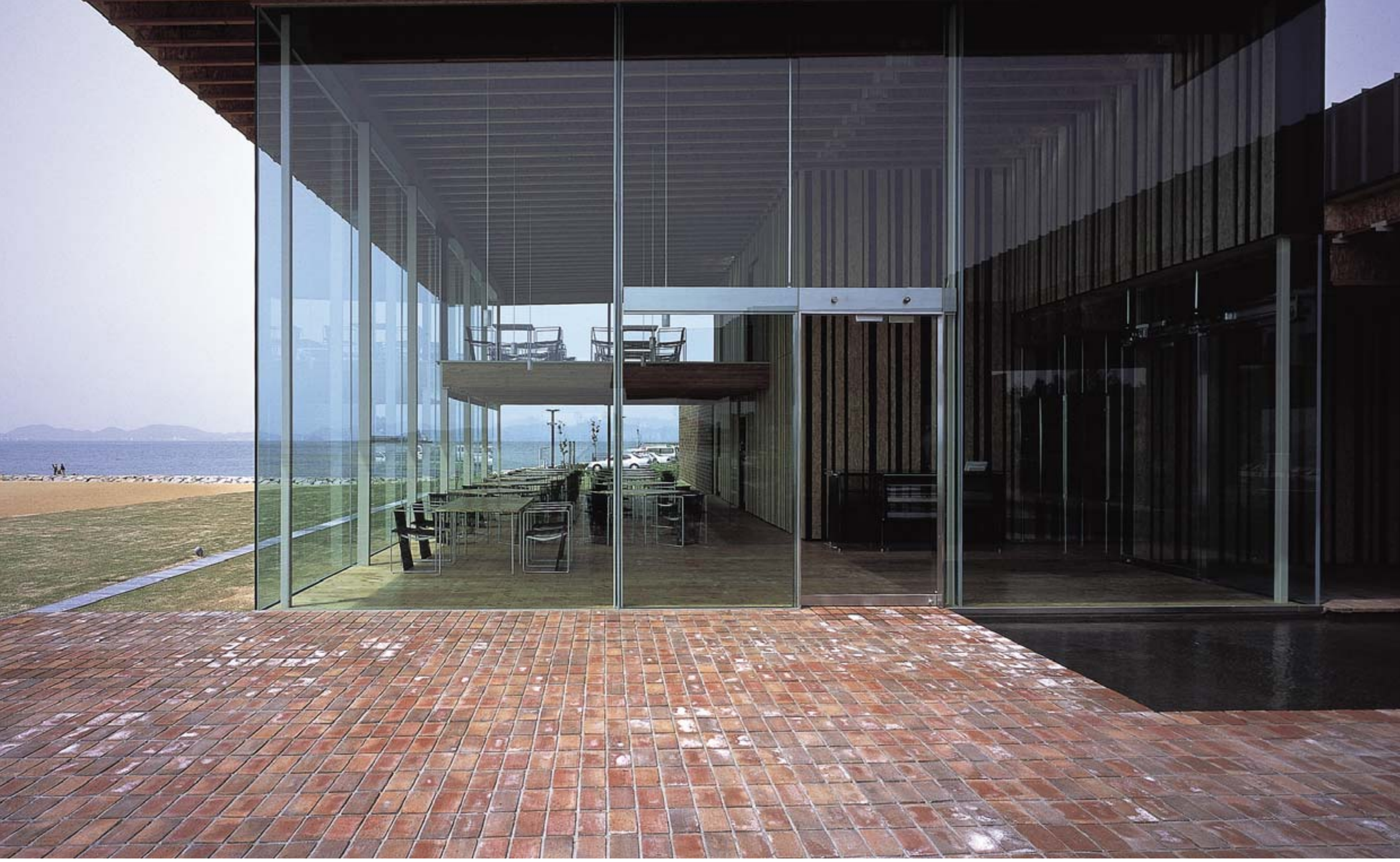



WEST PARK
1000

OPPOSITE / ELEVATION DETAIL
TOP / AERIAL VIEW FROM THE SOUTH
BOTTOM / VIEW OF FRONT FACADE



SEA/FILTER, ONODA, YAMAGUCHI PREFECTURE, 2001



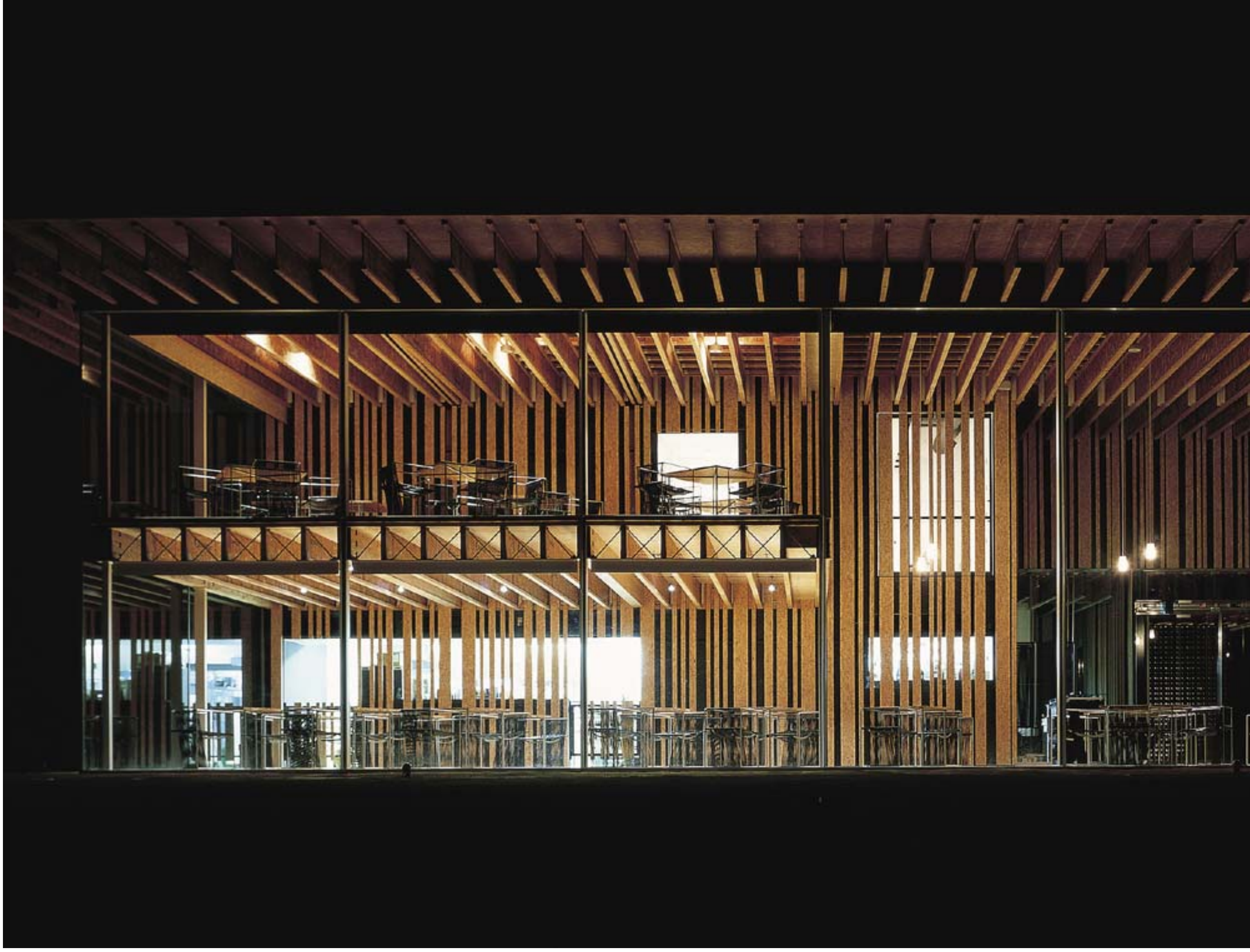
With his design for this restaurant located at the edge of the ocean, Kuma aimed at creating a strong link between the architecture and the sea. In order to connect the building intimately to the water—and, by extension, the constructed (artificial) world to the natural—Kuma made the volume as porous as possible, creating various apertures in the structure.

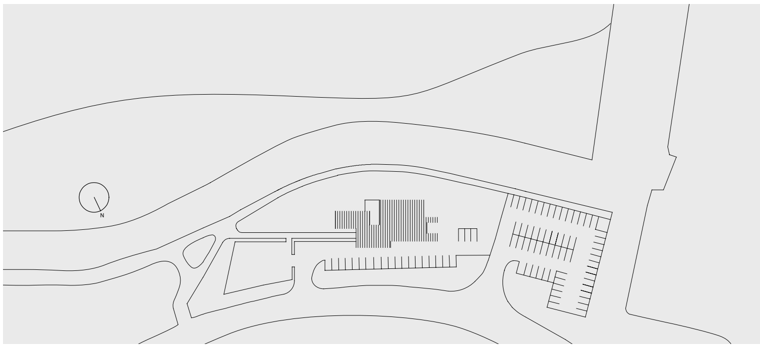
As a first step in this direction the architect divided the restaurant into two sections—a one-story bar and a two-story restaurant—with a large covered opening in between. The in-between space serves as the entrance to the facility, so that visitors catch sight of the horizon that lies beyond this gateway before approaching either one of the two buildings. The presence of shallow pools of water in this space anticipates the experience that awaits the guests on the seashore. Kuma used the same method of approaching a building through an open passageway in some of his other projects as well, including the River/Filter, the Stone Museum, and the Museum of Ando Hiroshige.

The walls facing away from the ocean are made of brick to provide privacy from the road behind, yet the numerous pores in the material constitute another type of opening. As the building is located in a region known for producing high-quality clay, Kuma used local clay to bake bricks with three holes. These were then laid vertically so that the ocean is made visible through a network of holes. Steel bars are inserted at joints, in both vertical and horizontal directions, and fixed to a steel frame at their top and bottom ends.

The ocean-side facade, on the other hand, is constructed entirely of glass, which is attached directly to solid steel columns. While the brick walls bear the seismic forces that may occur, the columns carry only the vertical load; this structural system made the application of extremely fine steel columns possible. The ocean-side columns and the land-side walls are connected by the rigid plane of the roof structure. Composed of densely spaced wooden joists, it provides rhythm to the space beneath.

On the interior, the solid back walls that separate the public spaces from the service areas behind in both the bar and the restaurant are faced with wooden chipboards, arranged vertically. A mezzanine level in the restaurant building provides additional seating for guests as well as rooms for the staff and other service spaces. The kitchen, storage, and washrooms are located on the first floor.





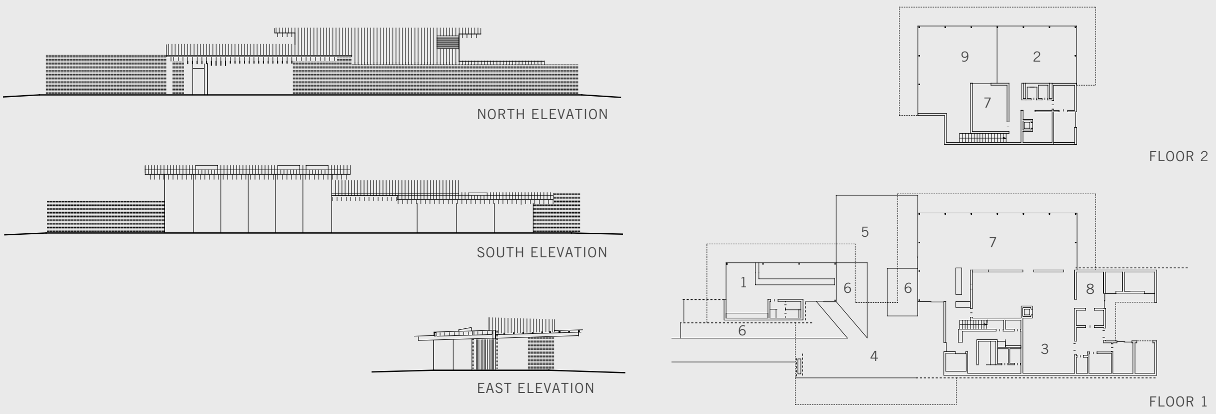
PREVIOUS PAGE
VIEW FROM THE SEA

OPPOSITE
VIEW OF DINING HALL FROM TERRACE

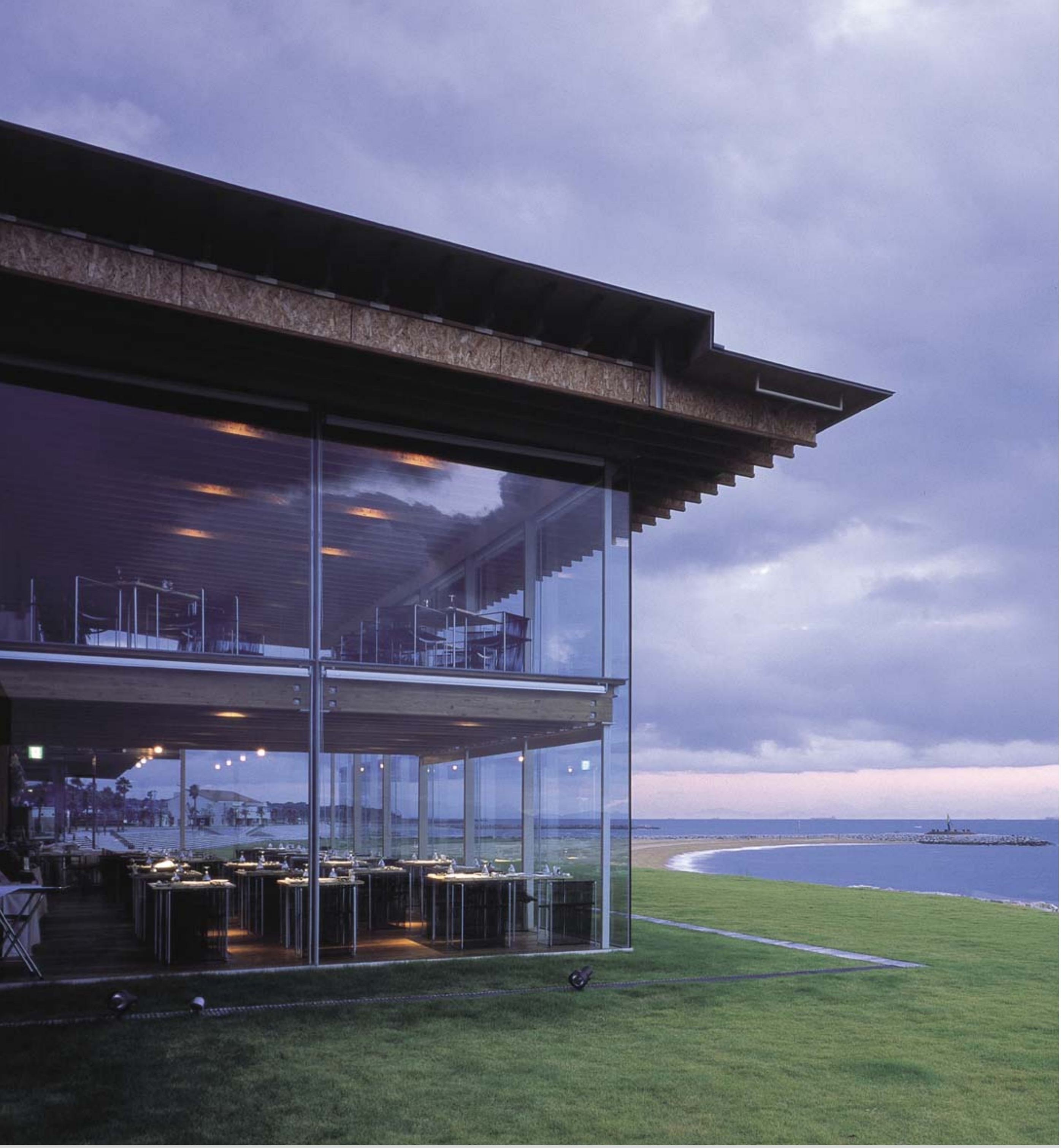
TOP
NIGHT VIEW OF DINING HALL

MIDDLE
SITE PLAN

BOTTOM
ELEVATIONS AND FLOOR PLANS


NORTH ELEVATION
SOUTH ELEVATION
EAST ELEVATION
9
2
7
FLOOR 2
5
7
1
6
6
8
6
3
4
FLOOR 1

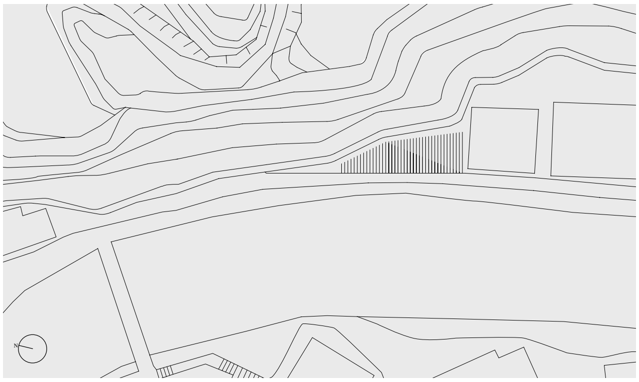
1 / BAR
2 / RESTAURANT
3 / KITCHEN
4 / ENTRANCE PORCH
5 / TERRACE
6 / POOL
7 / DINING ROOM
8 / PANTRY
9 / VOID

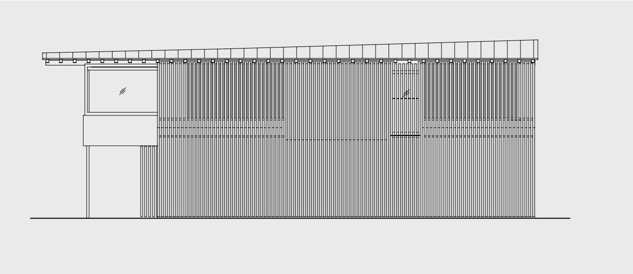


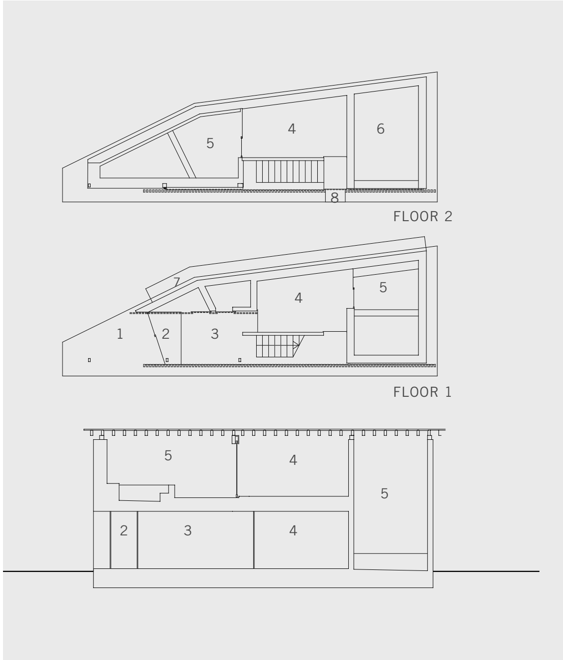
ABOVE / DETAIL OF RESTAURANT WING
OPPOSITE TOP / VIEW OF OPEN PASSAGE BETWEEN THE TWO WINGS
OPPOSITE BOTTOM / INTERIOR VIEW OF DINING HALL

Bar
Cafe

GINZAN ONSEN HOT SPRING BATH HOUSE, OBANAZAWA, YAMAGATA PREFECTURE, 2001







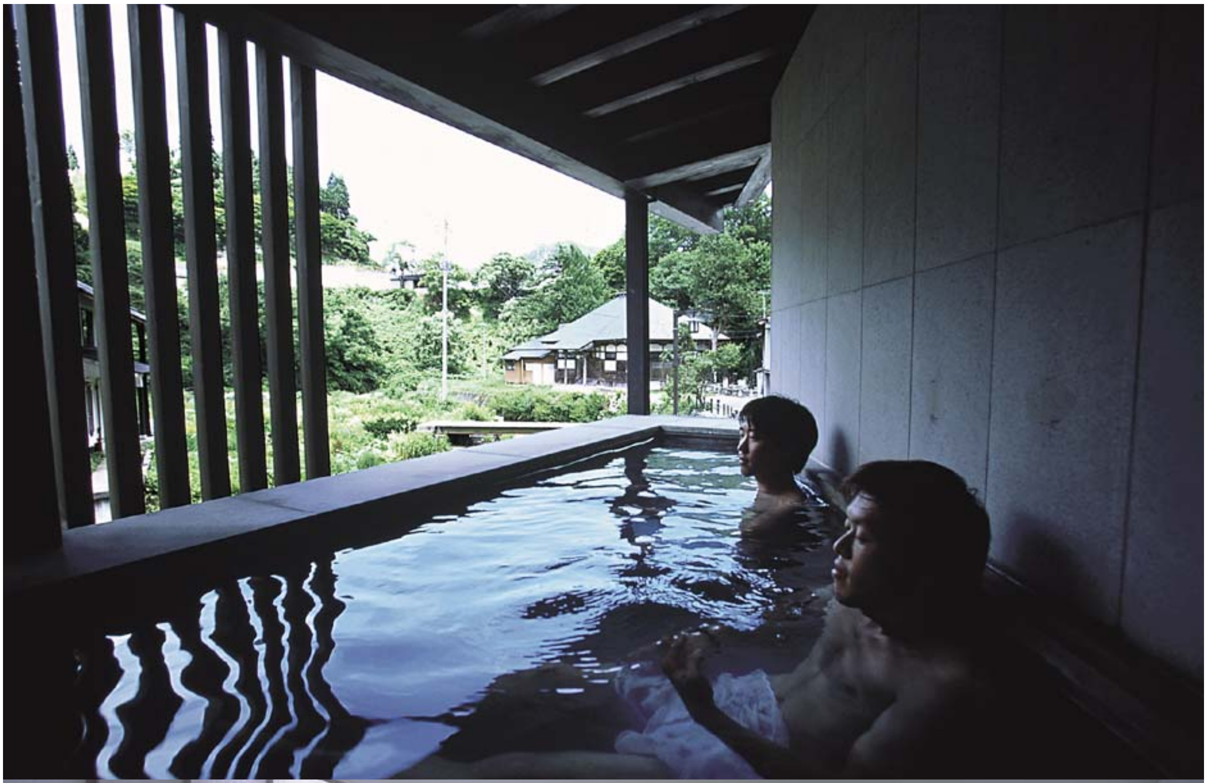
1 / PILOTIS
2 / ENTRANCE
3 / WAITING ROOM
4 / DRESSING ROOM
5 / BATH
6 / VOID
7 / SNOW MELTING ROOM
8 / TERRACE

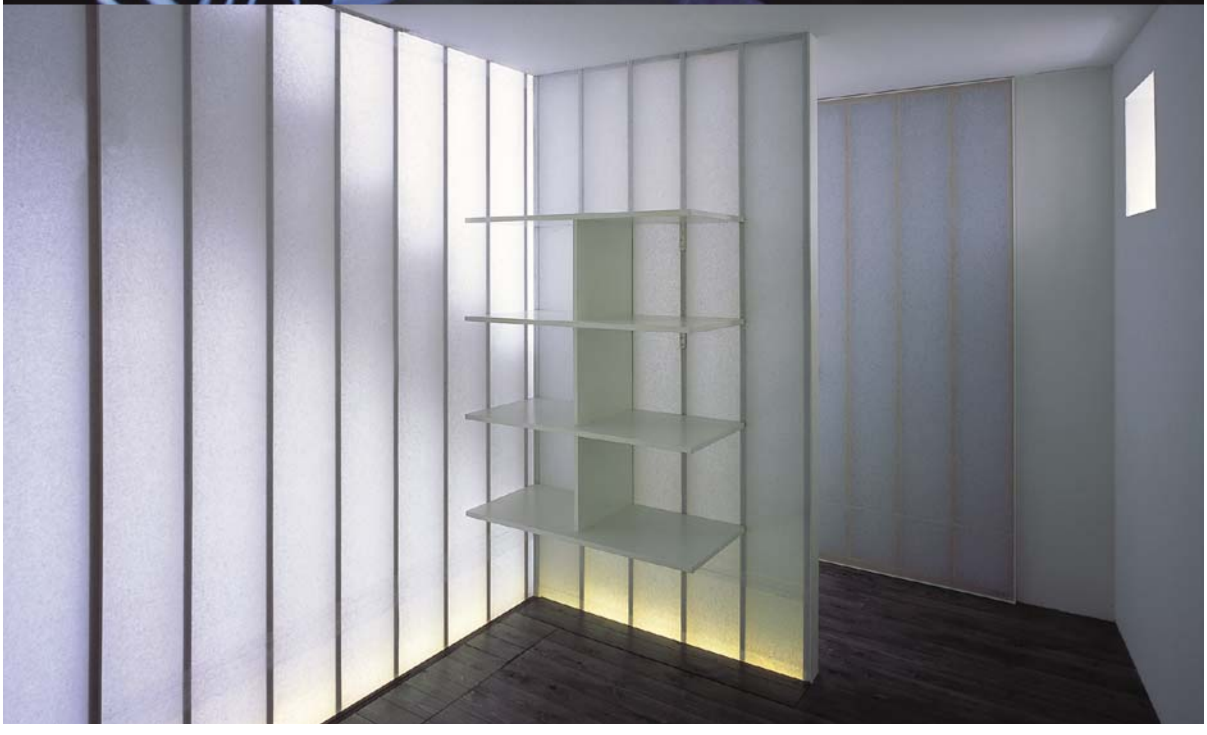
Ginzan Onsen is a historic hot-spring resort located in a deep valley carved by the Ginzan River. At the heart of the community are twenty wooden Japanese inns (*ryokans*) situated along the banks of the river. The tiny Ginzan Onsen Hot Spring Bath House is a public facility for both residents and visitors.

As the resort's ground area for building is limited, its wooden structures are all three to four stories high, resulting in a unique scenery compared to other regions in Japan, where horizontal wooden architecture with a maximum of two stories dominates. The site of the public bath is also extremely small and narrow. While the width of the road in front measures just over six feet (two meters), the depth of the site varies between only six and about nineteen feet (two and six meters).

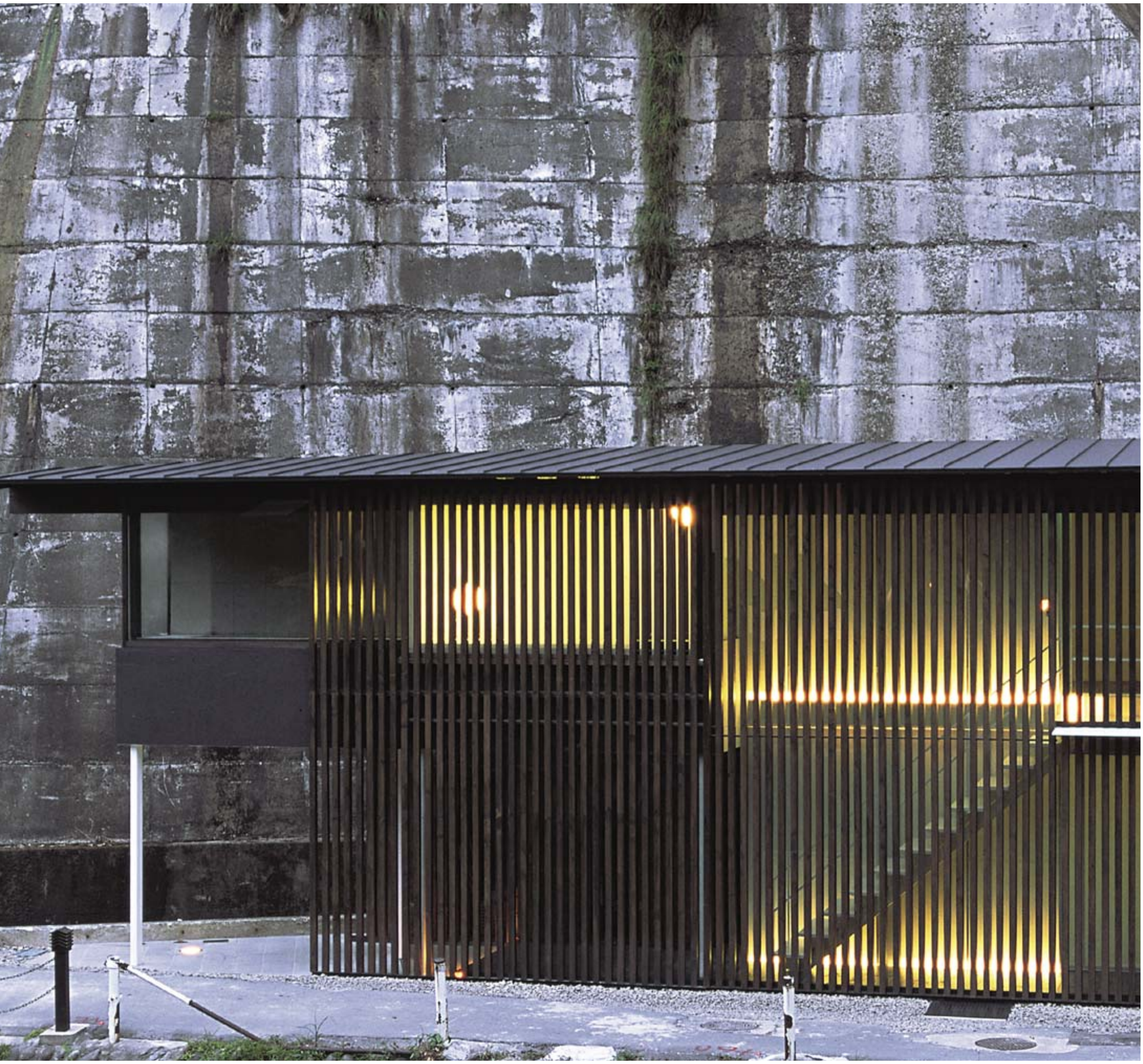
The proximity of the small river suggested creating a close connection between the architectural space of the bathhouse inside and the natural environment and the road outside. A sharp separation of the architecture from its environment by means of a solid wall would have resulted in a loss of a sense of depth both inside and out, creating an overall oppressive atmosphere. Kuma's goal was instead to establish a relationship between nature and architecture that was as ambiguous as possible, allowing their spaces to interact and influence each other, while at the same time marking some boundary between the two.

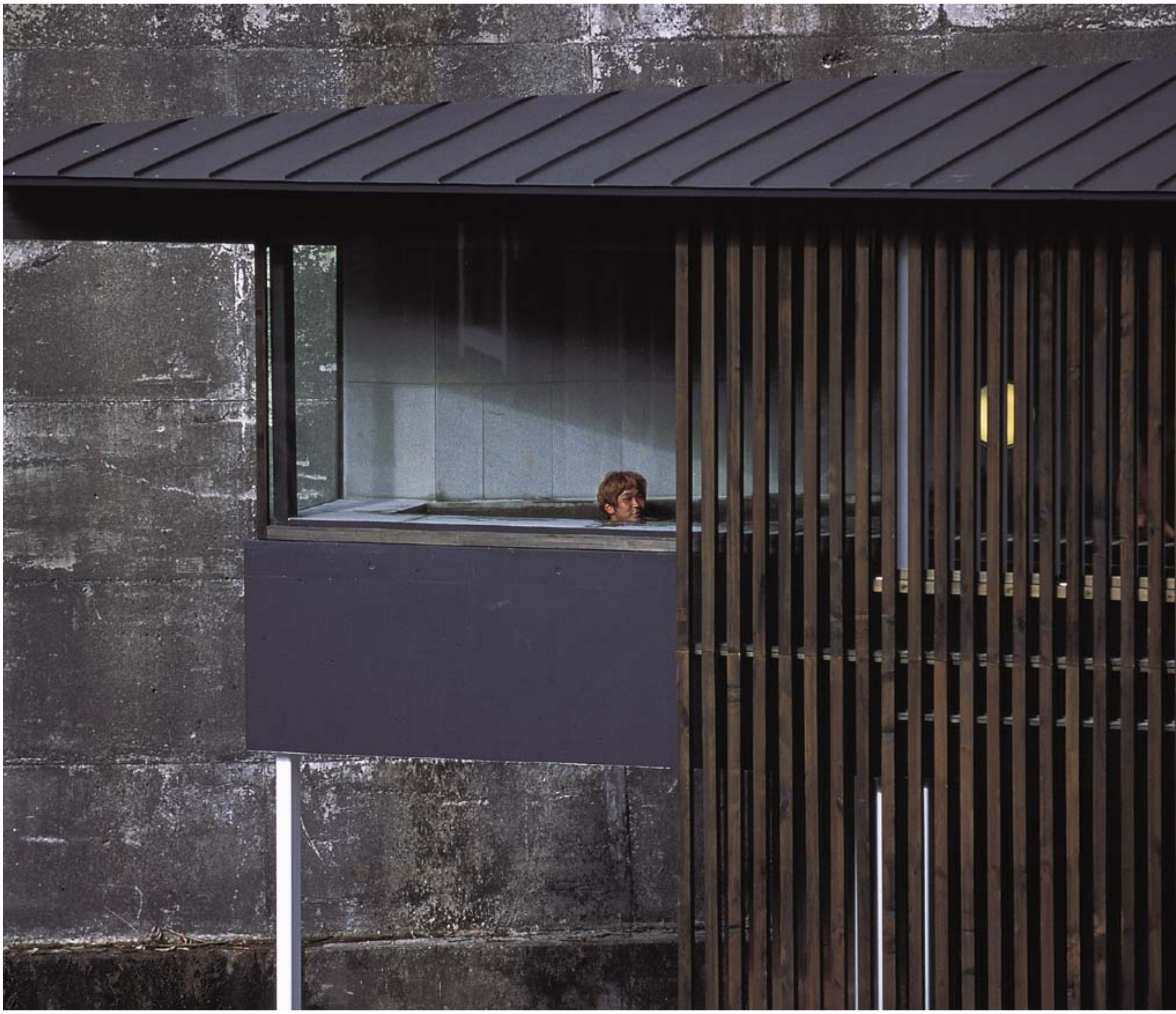
Accordingly, he designed a permeable wall of louvers that can be moved to achieve various relationships between the street and the architecture. The two overlapping sliding louvers create open and enclosed sections in the wall. While one of the louvers is wooden, reminiscent of traditional Japanese architecture, the other is made of acrylic material. Kuma's solution thus met both the need for separation and privacy and the desire for transparency. Achieving privacy was important because visitors to Japanese public baths enter the pool without wearing swimwear. A close connection to nature was also desirable, however, as the bath is taken not so much for hygienic reasons (visitors cleanse themselves before entering the pool) but to relax in the natural hot water. Kuma has succeeded in providing both conditions in a remarkable way. The impressively minimalist yet sophisticated architecture of the Ginzan Onsen Bath House is surpassed only by the simplicity of his other hot spring bath, the Horai Onsen Bath House in Atami.



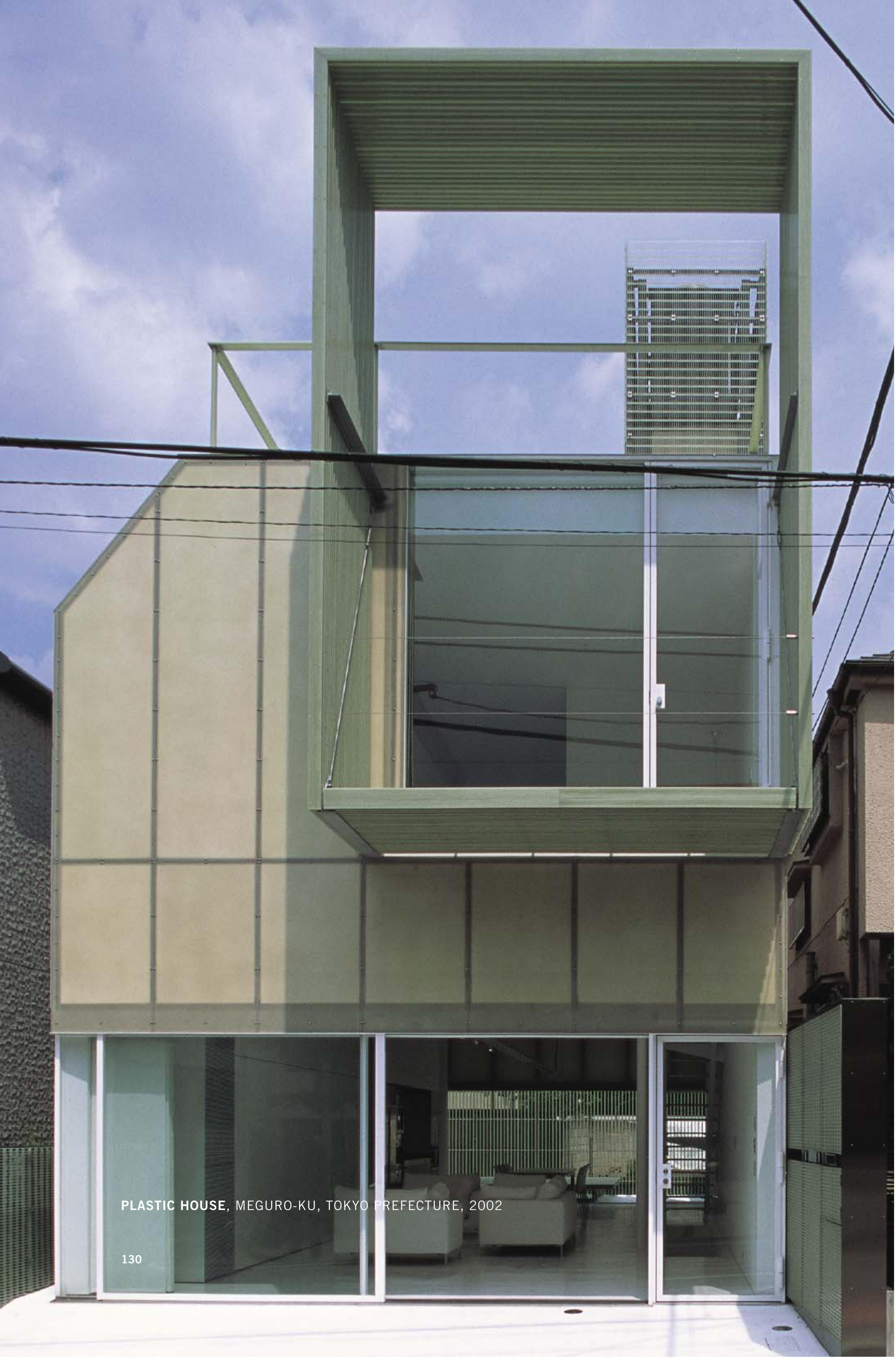


OPPOSITE TOP LEFT / SITE PLAN
OPPOSITE BOTTOM LEFT / ELEVATION
OPPOSITE RIGHT / FLOOR PLANS AND SECTION
TOP / DETAIL OF UPPER-LEVEL BATH
BOTTOM / INTERIOR VIEW OF LOWER-LEVEL DRESSING ROOM

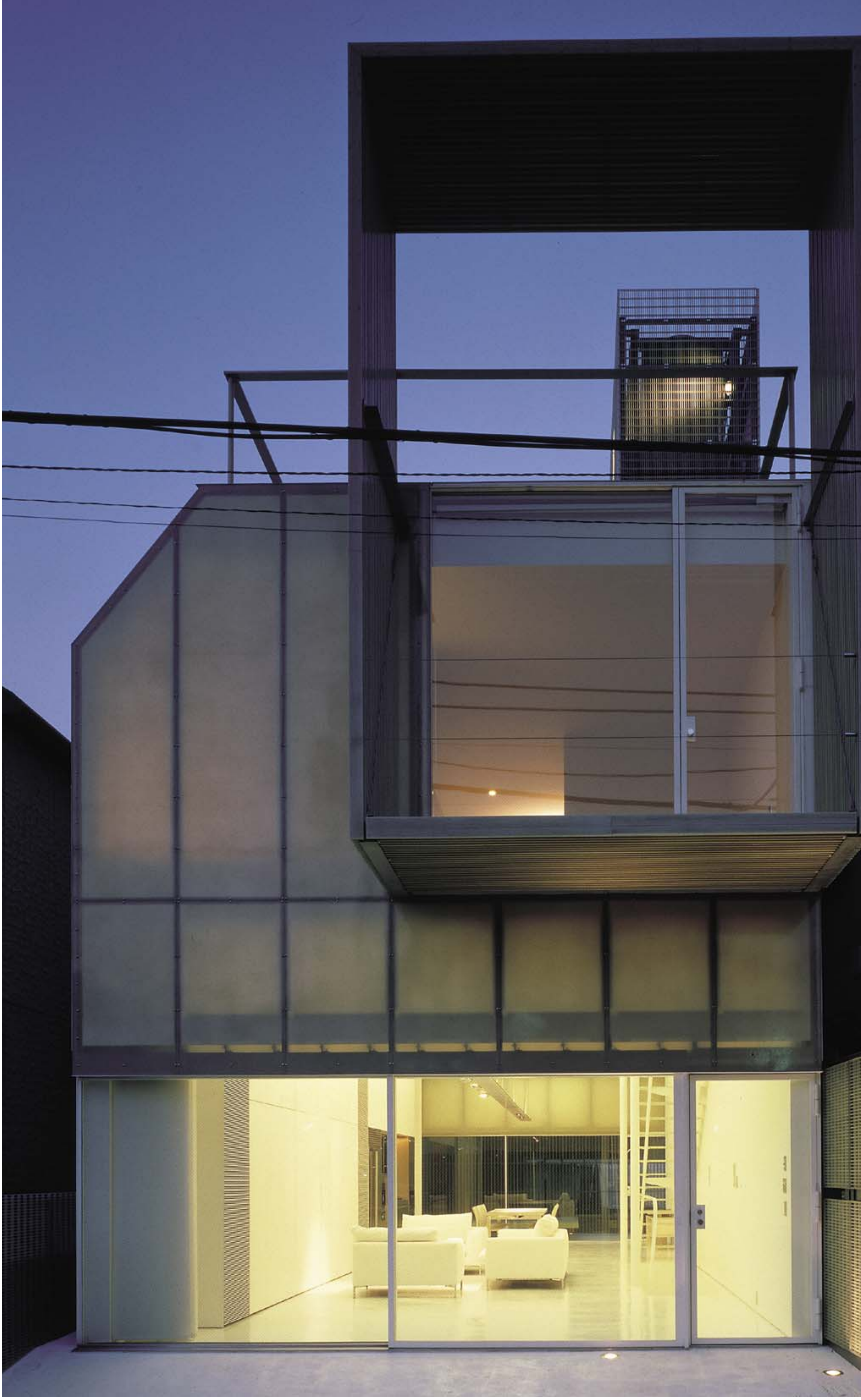


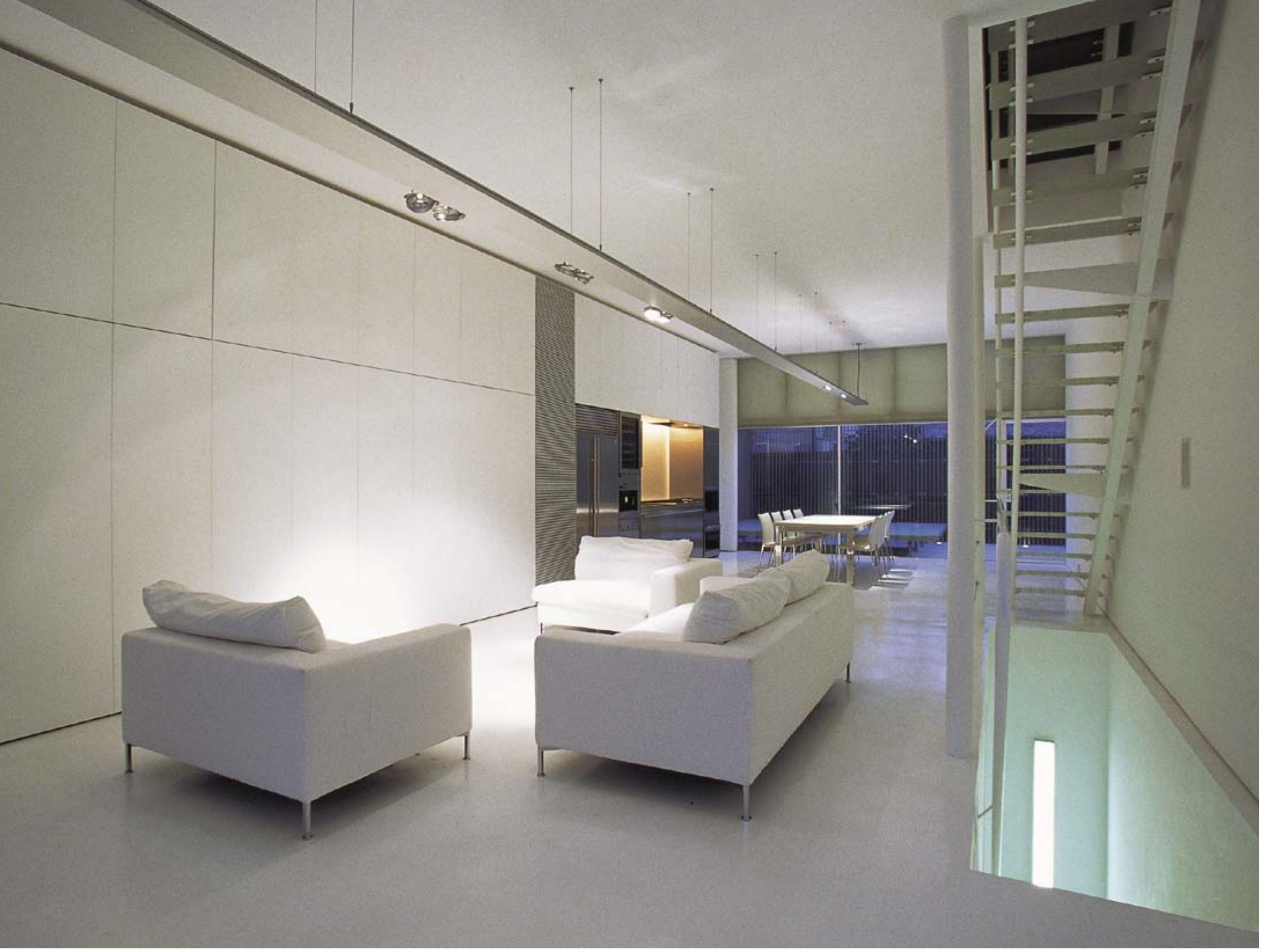


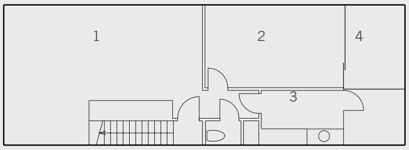
OPPOSITE / EXTERIOR VIEW WITH SHUTTERS CLOSED
ABOVE / DETAIL WITH SHUTTERS OPEN



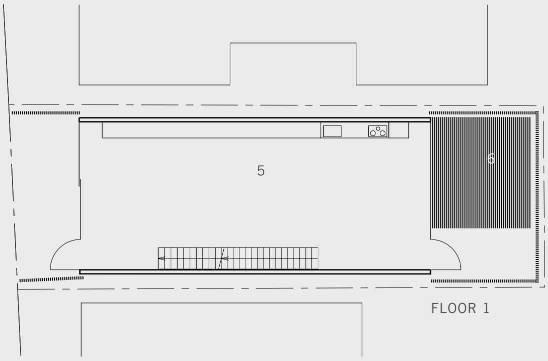
PLASTIC HOUSE, MEGURO-KU, TOKYO PREFECTURE, 2002







BASEMENT



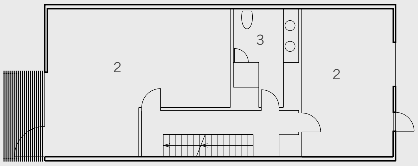
FLOOR 1

1 / GALLERY
2 / BEDROOM
3 / BATHROOM
4 / SUNKEN LIGHT COURT
5 / LIVING, DINING, KITCHEN/STUDIO
6 / OUTDOOR SPACE WITH DECK OF PLASTIC LOUVERS
7 / TERRACE

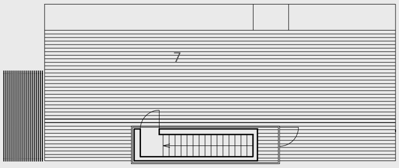
TOP
INTERIOR VIEW OF FIRST-FLOOR LIVING, DINING, AND KITCHEN/STUDIO AREAS

BOTTOM
FLOOR PLANS

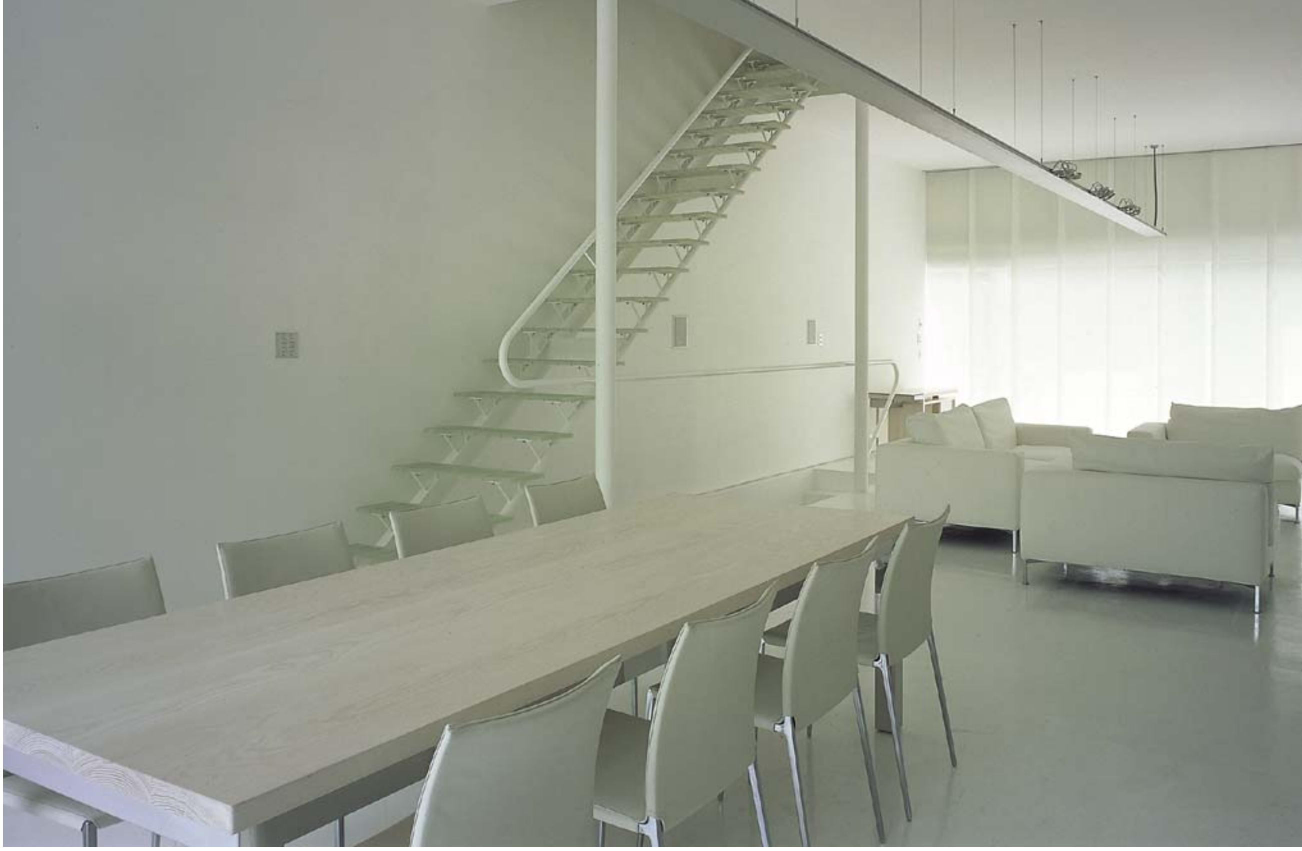
OPPOSITE
INTERIOR VIEW OF FIRST-FLOOR LIVING, DINING, AND KITCHEN/STUDIO AREAS



FLOOR 2



ROOF



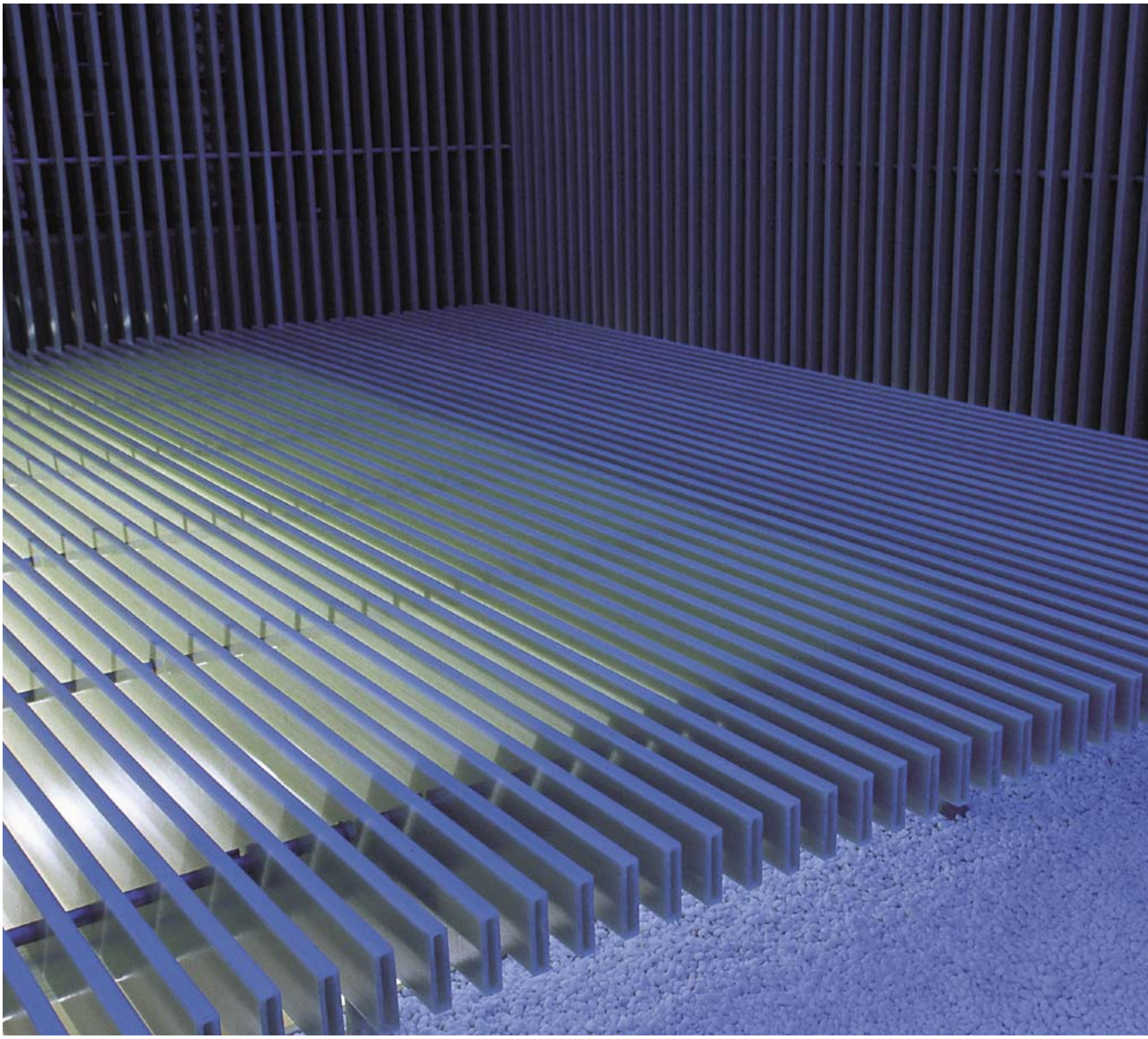
The Plastic House, designed for a photographer and his mother, a writer, is located in a densely built residential area. Its simple form was largely determined by statutory requirements and building lines. The two-story structure includes a photo studio in the basement and an open-air studio on the flat roof, which affords a view over the city. This space is also used for parties as well as for tea ceremonies, which are held in the rear of the roof terrace for friends of the client. Various areas of the house are open to the public—the mother's room in the basement is a small antique museum, and there is a constant flow of people in and out of the photo studio. The open outdoor space on the ground floor behind the building is used as a tearoom. The deck of this space, made of plastic bars, is situated over a large light-well that provides daylight to the basement.

The house features large areas of glazing on the ground floor, but most parts of the building were made of Fiber Reinforced Plastic (FRP) in order to achieve the desired qualities of lightness and openness. This material was also seen as a fitting response to the chaotic urban surroundings. Kuma was attracted to the opportunity of experimenting with different kinds of plastic and developing new details for this material. The walls facing the street and the garden are finished internally and externally with plastic panels, with an intermediate layer of translucent thermal insulation. The bedrooms are thus linked to the outside world without suffering any loss of privacy. Similarly, the plastic bars of the garden fence, the veranda, and balcony provide both screening and exposure. Many other details, from the staircase treads to the fixings, were also executed in plastic, while, for pragmatic reasons, the load-bearing structure was made of steel.

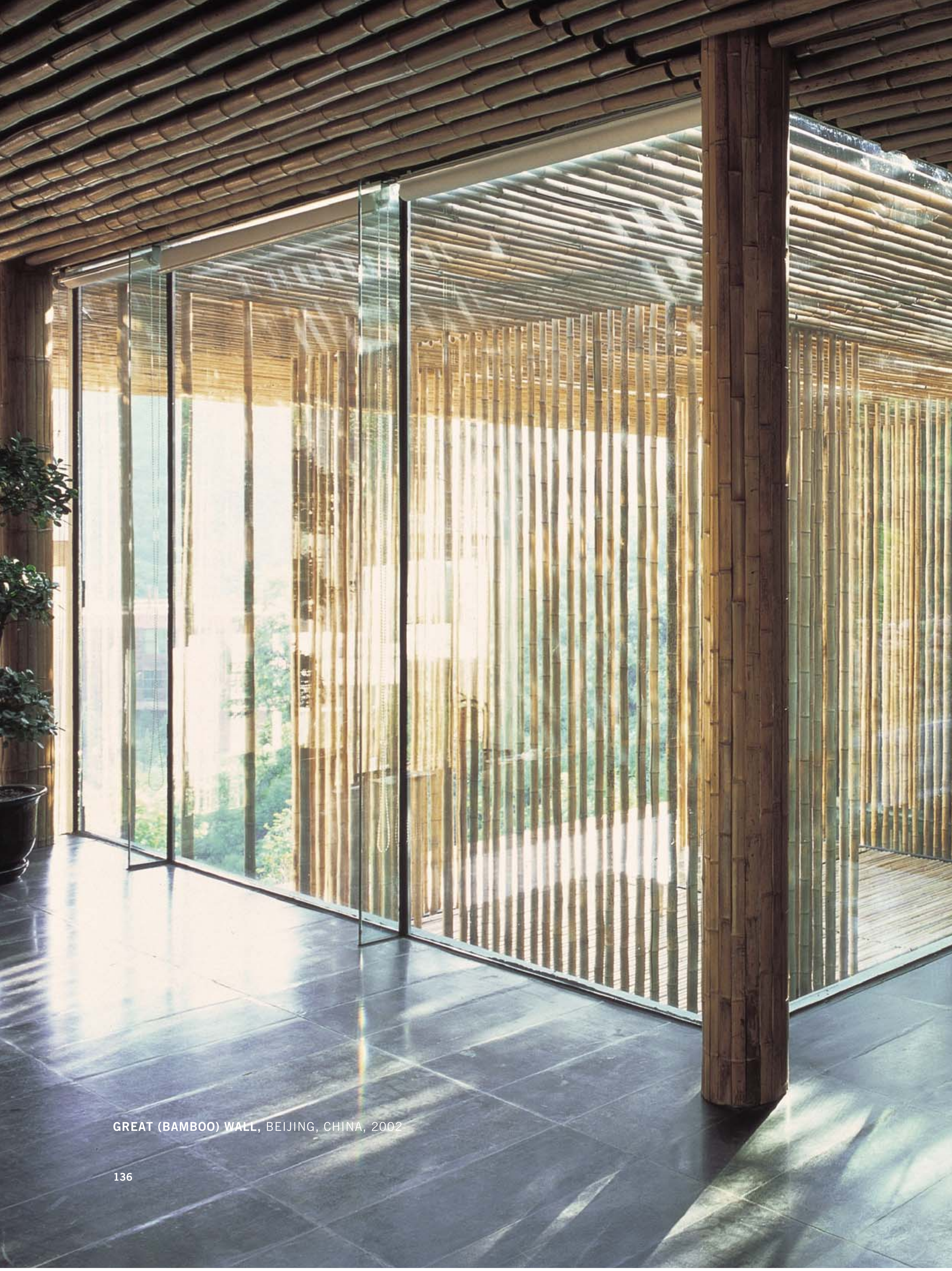
FRP is .15 inches (4 millimeters) thick and comes in various shapes. It is a unique material that sometimes looks like rice paper and sometimes like bamboo, depending on the quality of the contained fibers. In his design Kuma paid special attention to the changing visual quality of this material; Butyl rubber and plastic screws were selected for the construction, so as not to diminish the lightness and translucency of the plastic.

The design for the Plastic House can be seen in relation to Kuma's quest to escape from the massiveness of the concrete box. As he formulated it:

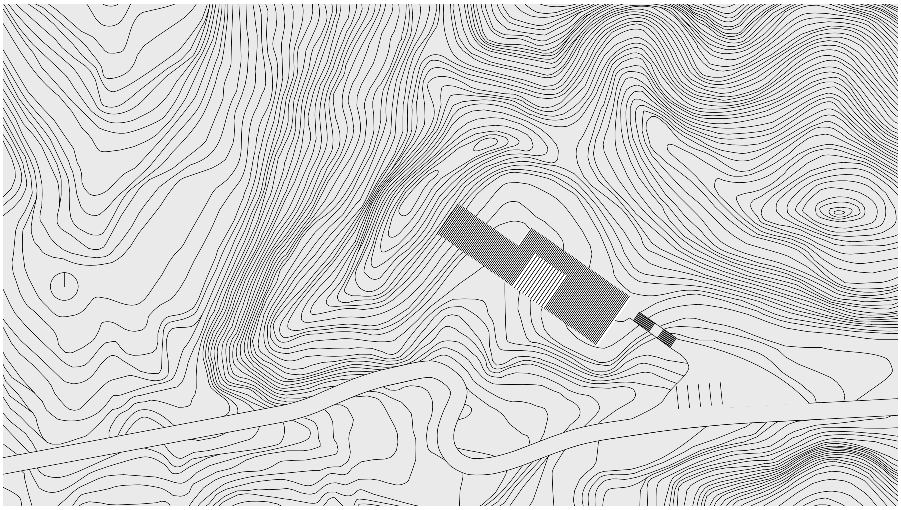
> If I were to describe the architecture of the twentieth century with one word, it would be "concrete." Its freedom and universality fit the twentieth century so well that other local methods of construction were abandoned. Moreover, the strength of the solid mass achieved in transformation from thick liquid substance suited an era that desired monumentality and security of privacy. Therefore to seek for a substitute [material] is not a mere formal proposal but an attempt to suggest a principle of living that replaces the fundamentals of the twentieth century—freedom (of course, in the sense of the era), strength, and security.



OPPOSITE / SUNKEN COURTYARD UNDER THE PLASTIC LOUVERS
ABOVE / DETAIL OF THE PLASTIC LOUVERS/DECK OVER THE SUNKEN COURT



GREAT (BAMBOO) WALL, BEIJING, CHINA, 2002



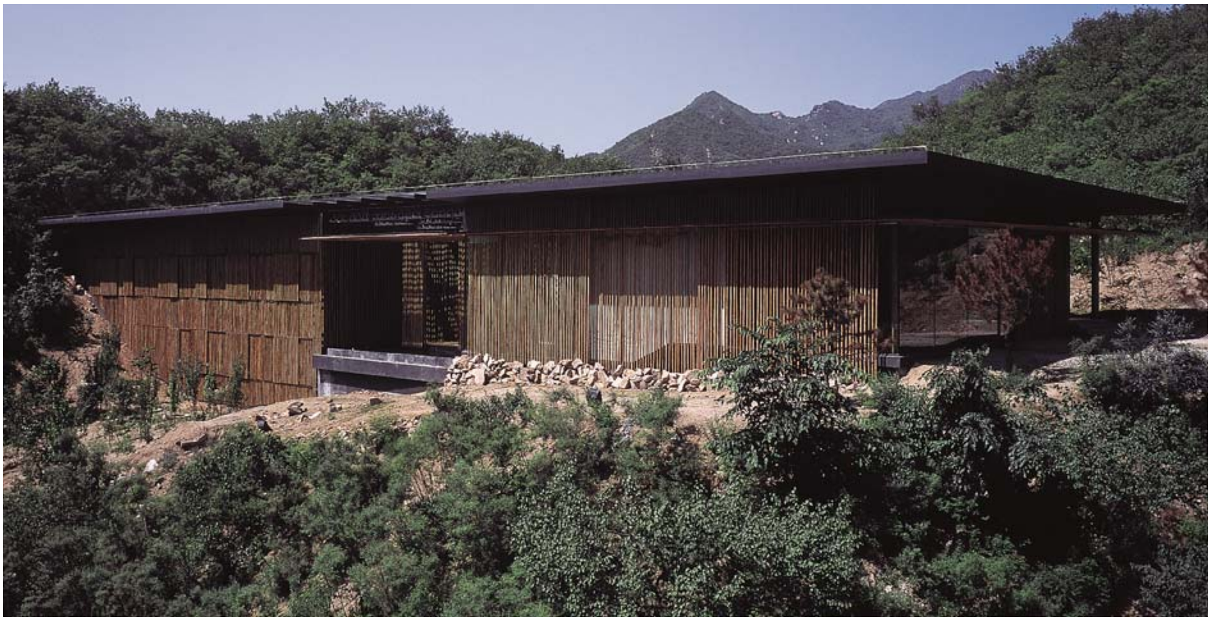
TOP
SITE PLAN

BOTTOM
EXTERIOR VIEW

OPPOSITE TOP
FLOOR PLANS

OPPOSITE MIDDLE
ELEVATION AND SECTION

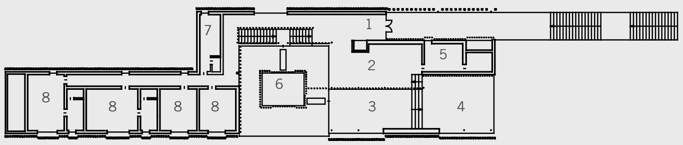
OPPOSITE BOTTOM
DETAIL OF SOUTH ELEVATION SHOWING PART OF THE LOUNGE



With this project, a guesthouse located close to the Great Wall, Kuma intended to reinterpret traditional qualities of Japanese architecture through the use of bamboo as both structural and non-structural element. The architect was intrigued by the characteristics of this material: as opposed to other wood products, which are all processed in one way or another before they are used as building materials, bamboo can only be used in its original form and is thus both a material and a product at the same time. Kuma's design, in which he applies his usual method of "particlization," especially emphasizes the disposition of bamboo as material. Positioning the individual pieces of the wood so as to resemble bamboo in its natural environment, Kuma seems to reveal the true essence of this material in his design.

The guesthouse's close proximity to the Great Wall was another important element in the design. The wall seems to run virtually endlessly along the undulating ridgeline of the mountainous landscape without being disconnected from its surrounding environment. Kuma wanted to endow his project, which he deliberately called a "wall" instead of a "house," with the same quality.

Bamboo is applied extensively throughout the house to shape boundaries in the form of light screens, but the heart of the design is a lounge at the center of the building. Serving as a small tearoom, this space, made up almost entirely of bamboo, is set in a shallow reflecting pool. It is reached by two stepping stones that form a small bridge and is open to the south toward the Great Wall, which is visible from this site. A glass canopy shelters the lounge, while the use of bamboo beneath the glass and elsewhere filters in light and provides the space with an ephemeral quality that makes the experience of this architecture especially memorable.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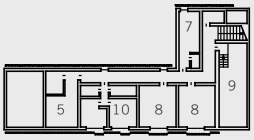
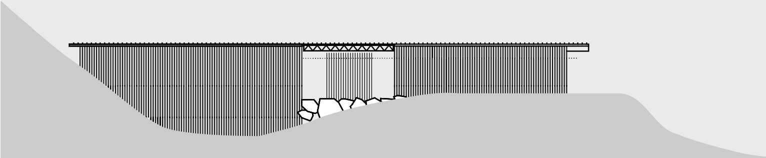
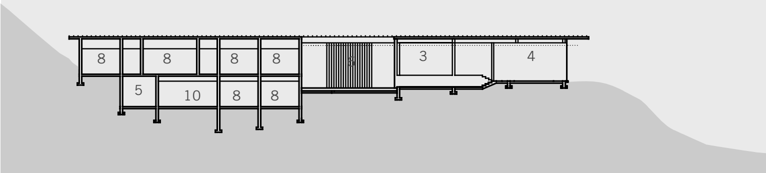
FLOOR 1



FLOOR 1



SOUTH ELEVATION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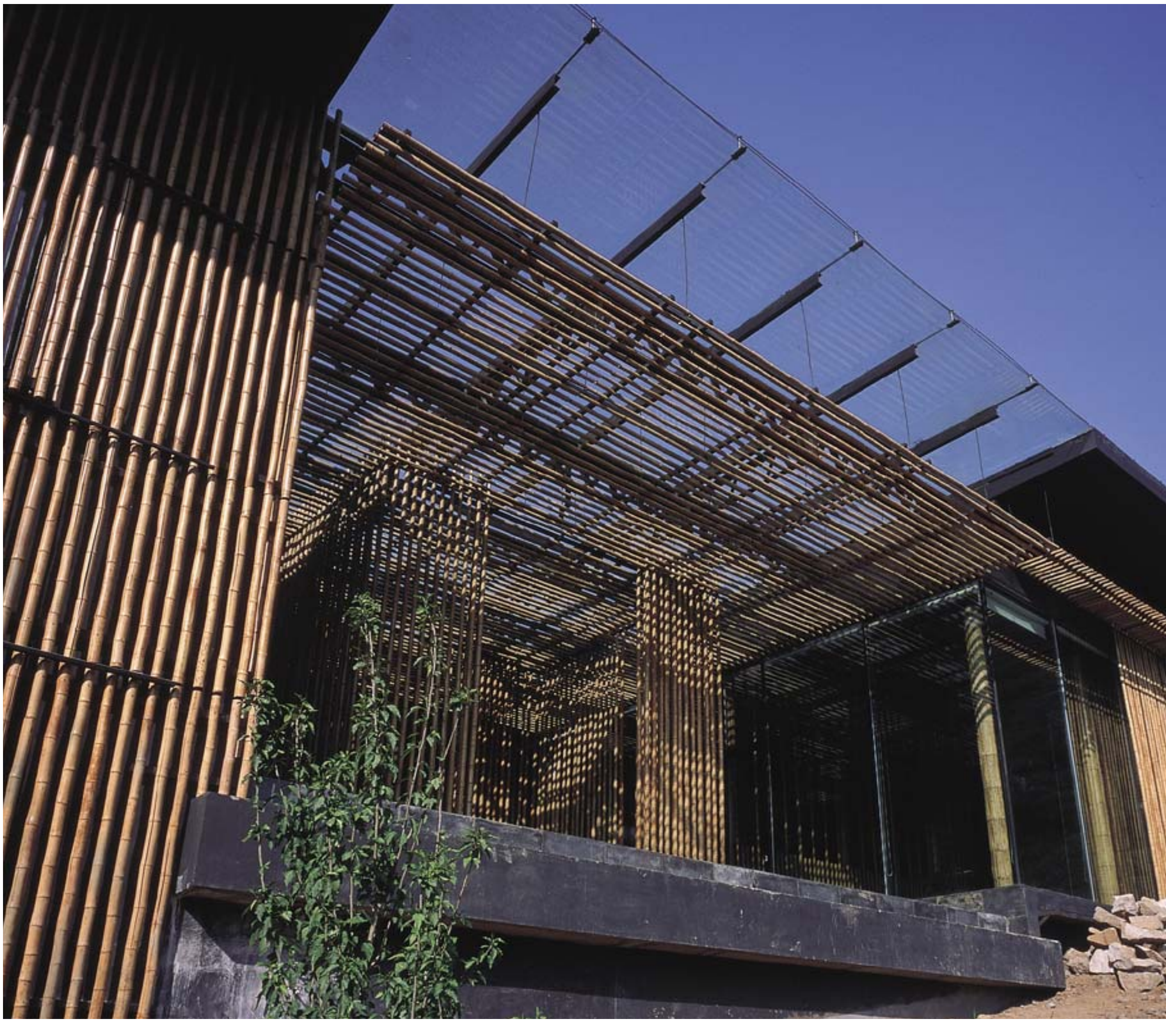
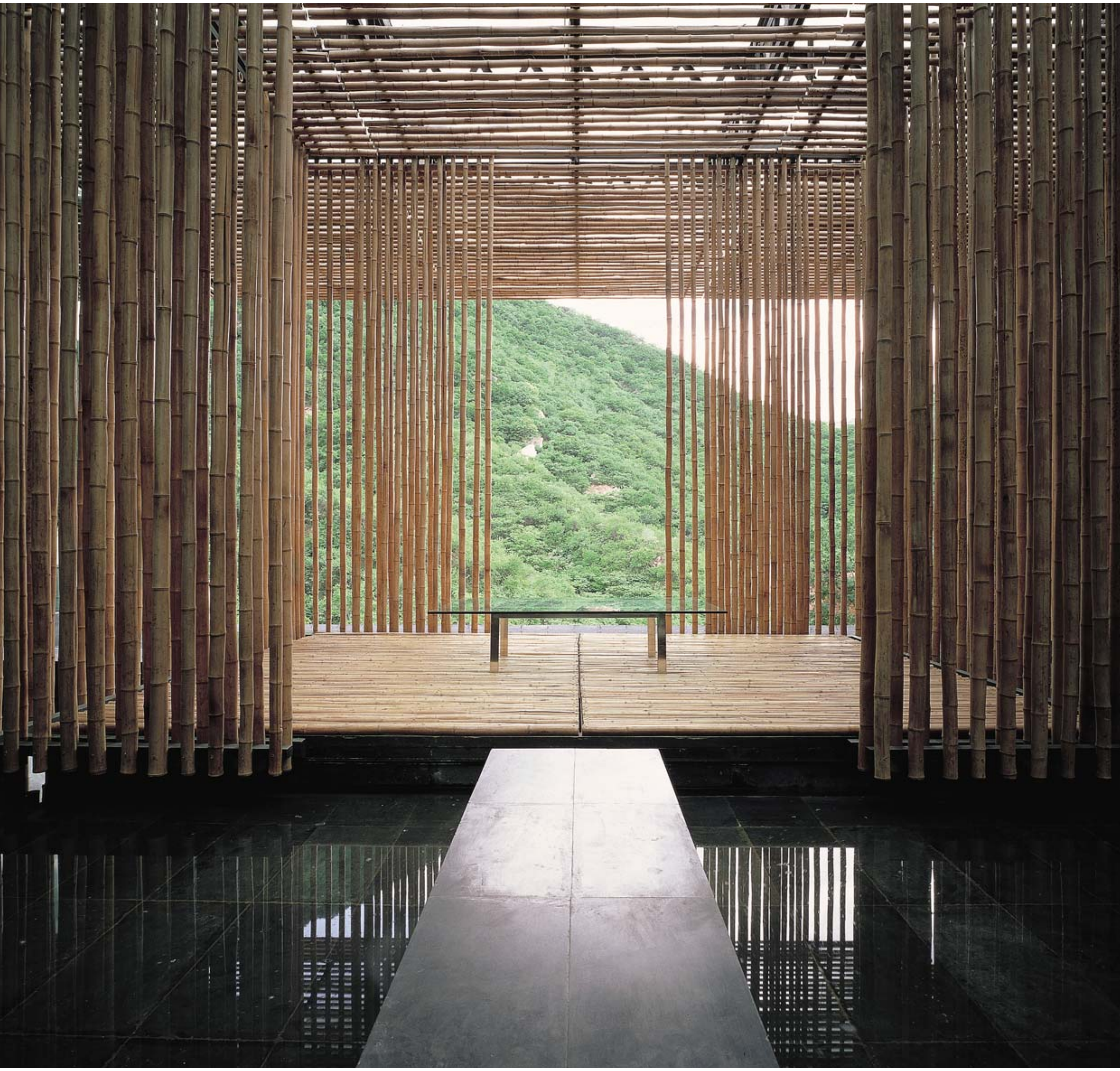
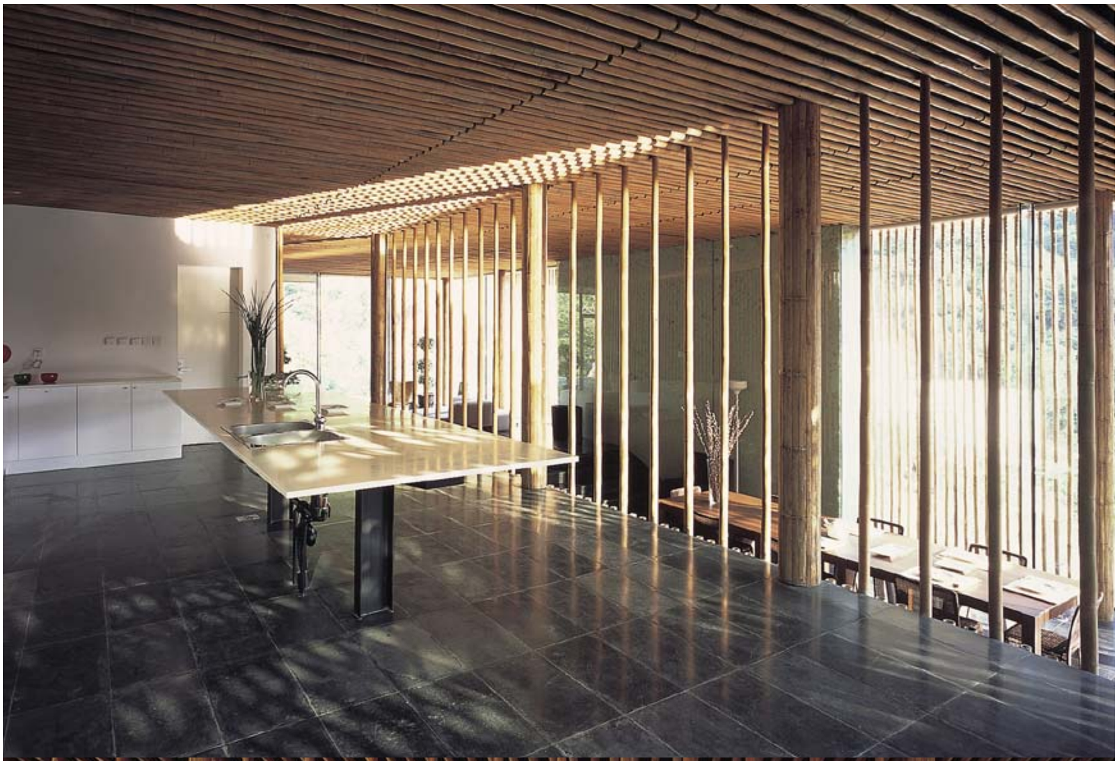
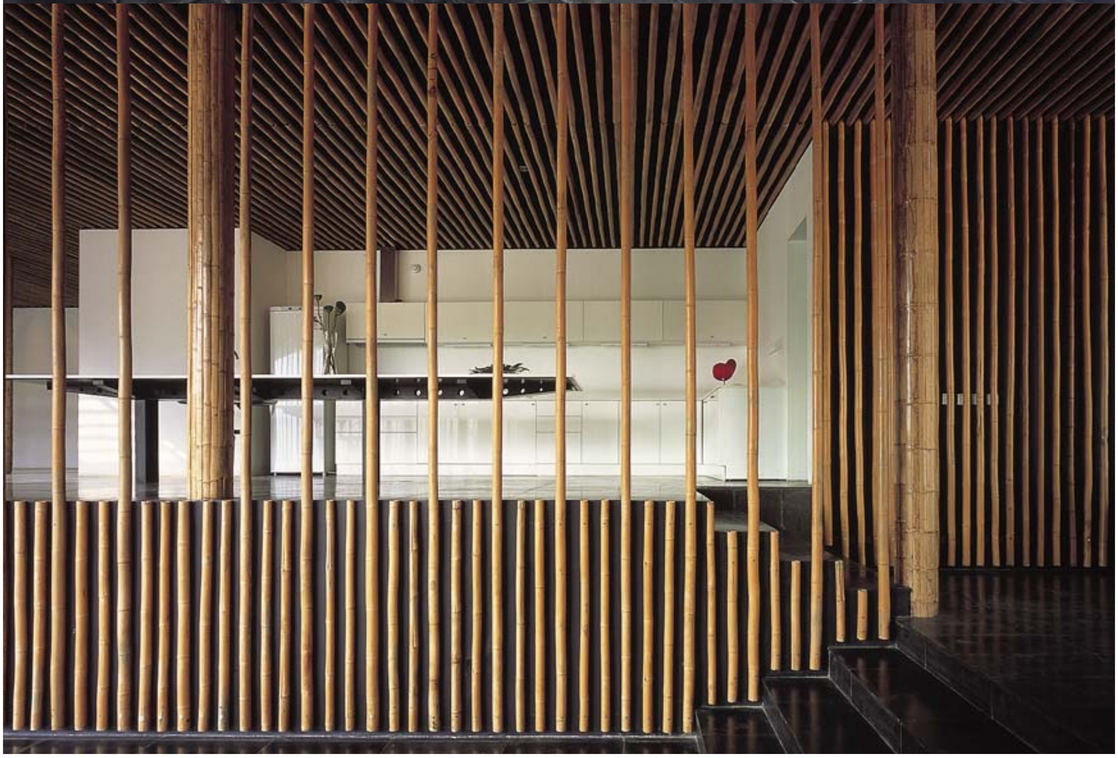
1 / ENTRANCE
2 / KITCHEN
3 / DINING ROOM
4 / LIVING ROOM
5 / STORAGE
6 / LOUNGE
7 / BATHROOM
8 / GUEST ROOM
9 / MACHINE ROOM
10 / STAFF ROOM

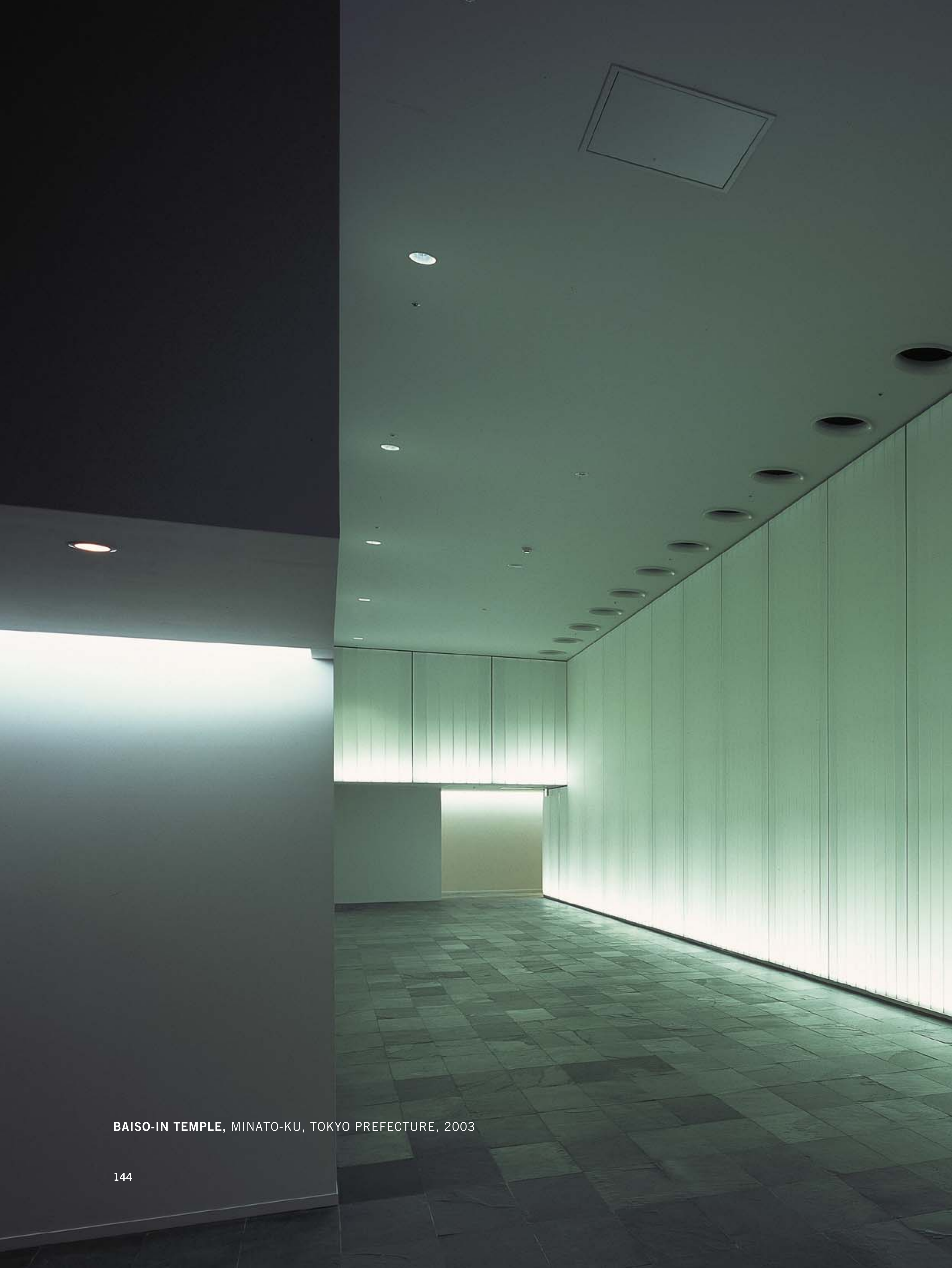




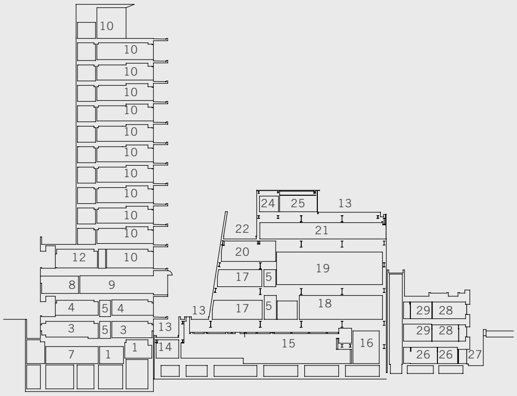




PREVIOUS PAGES / INTERIOR VIEWS OF BAMBOO LOUNGE
TOP / INTERIOR OF KITCHEN WITH VIEW OF DINING AREA
BOTTOM / VIEW OF KITCHEN FROM DINING AREA
OPPOSITE / INTERIOR DETAIL



BAISO-IN TEMPLE, MINATO-KU, TOKYO PREFECTURE, 2003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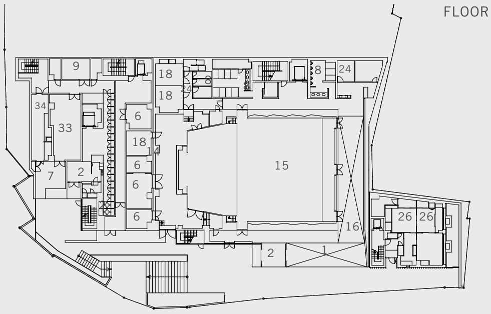
FLOOR 1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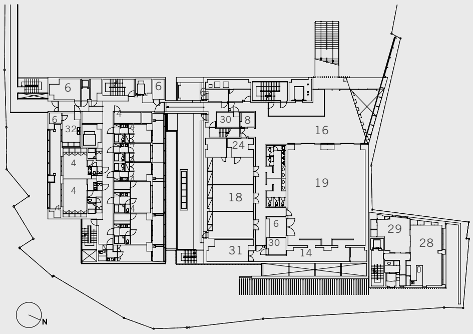
BASEMENT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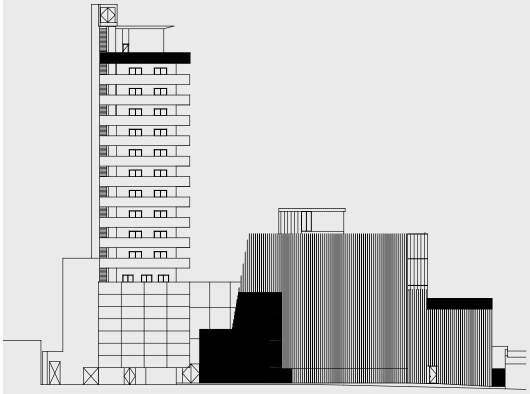
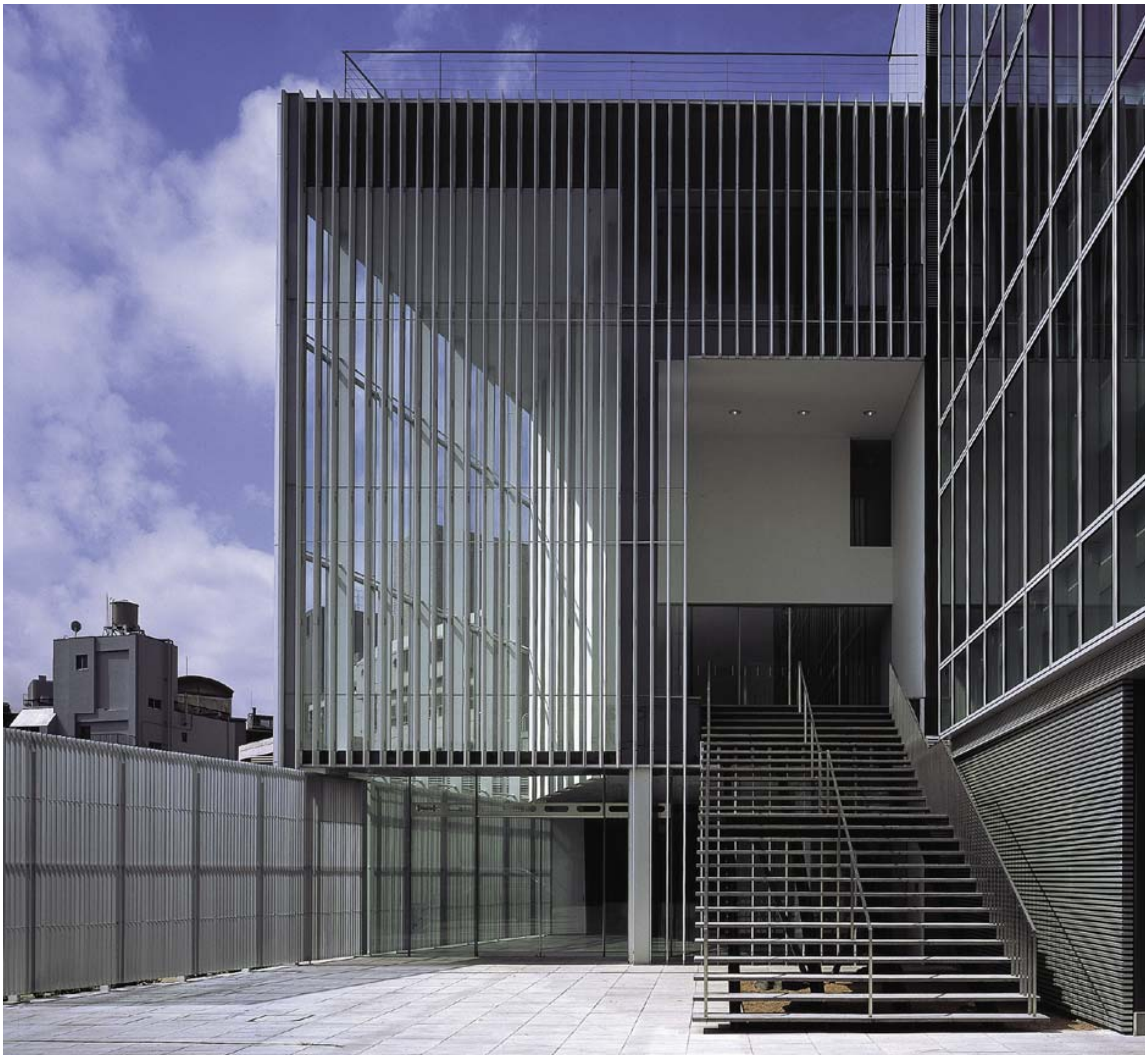
FLOOR 1



1 / ENTRANCE HALL
2 / WINDBREAK ROOM
3 / AUDITORIUM
4 / DORMITORY
5 / CORRIDOR
6 / STORAGE
7 / PARKING
8 / BATHROOM
9 / GUEST ROOM
10 / HOUSING
11 / BLACONY
12 / CLOSET
13 / TERRACE
14 / BACK HALL
15 / MASTER'S HALL
16 / LOBBY
17 / LIGHTING ROOM
18 / WAITING ROOM
19 / KANNON HALL
20 / MAIN HALL
21 / LIBRARY
22 / TEMPLE'S BUREAU
23 / OUTDOOR MACHINE AREA
24 / HOT WATER SERVICE ROOM
25 / GUEST ROOM
26 / JAPANESE-STYLE ROOM
27 / DRY AREA
28 / LIVING ROOM
29 / BEDROOM
30 / DRESSING ROOM
31 / MACHINE ROOM
32 / WASHING ROOM
33 / ELECTRIC ROOM
34 / GARBAGE DUMP

TOP LEFT / SECTION AND FLOOR PLANS
BOTTOM LEFT / ELEVATION
RIGHT / ELEVATION DETAIL

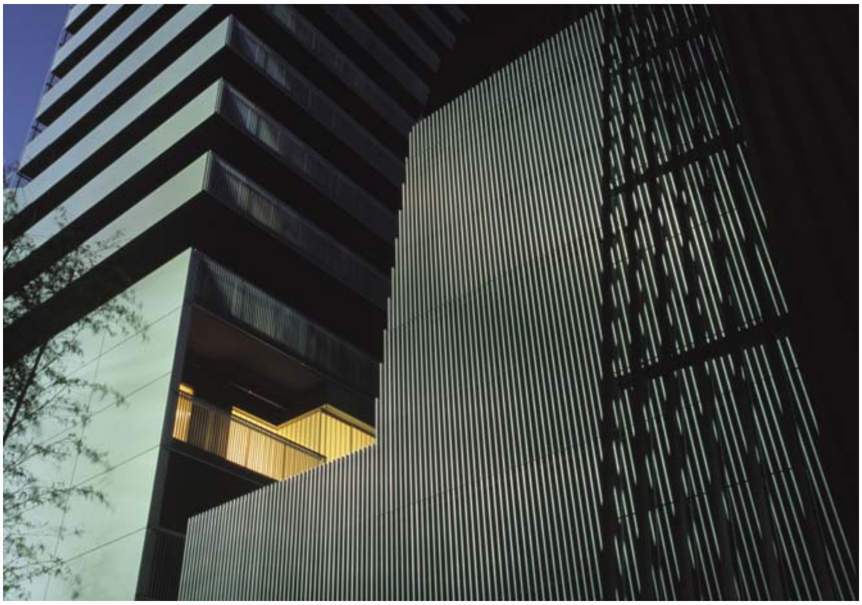


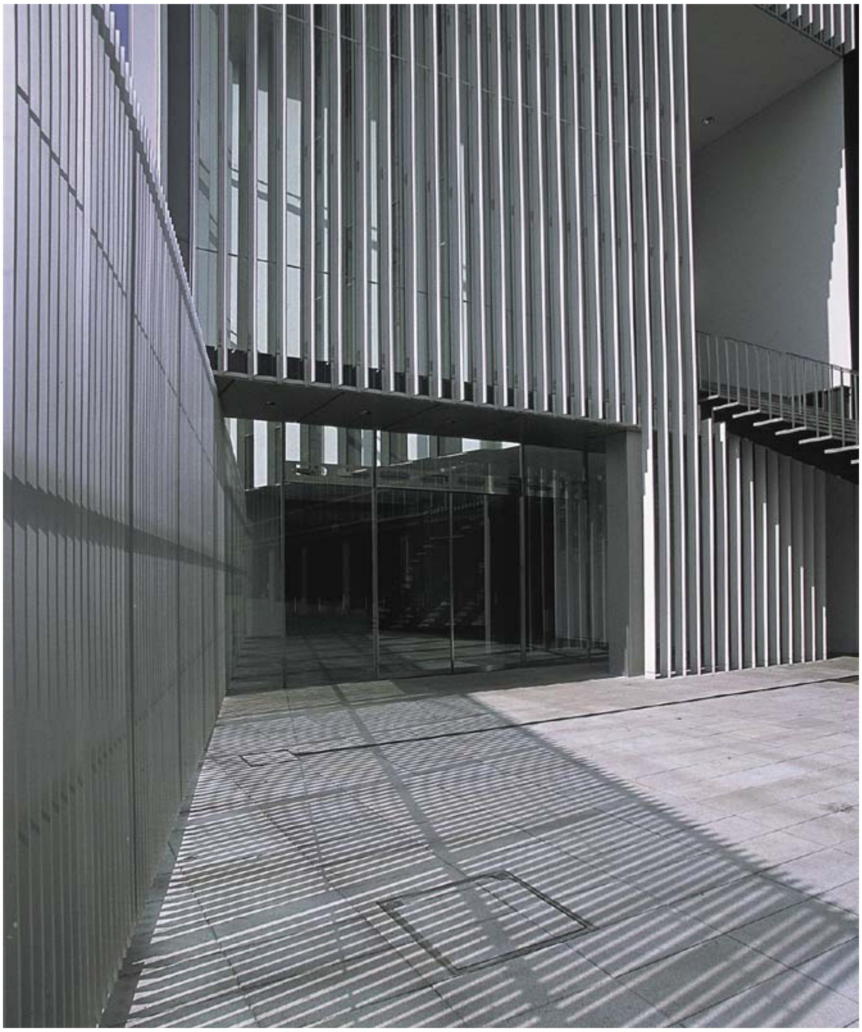
ABOVE / ENTRANCE TO UPPER-LEVEL PUBLIC FACILITIES

This project is a new building for the Baiso-in Temple in Tokyo, one of the city's oldest Buddhist temples, built 360 years ago. In historic times temples and churches acted as community centers and venues for all kinds of cultural activities in the city. With his design for the new structure, Kuma wanted to give back to the temple its lost status as a focal point and an institution open to citizens.

The large complex is comprised of two volumes: the smaller building houses the temple itself and all its public functions, while an adjoining multistory block accommodates apartments, visitors' quarters, and the abbot's residence. The entrance to the temple is formed by a slanted black wall composed of glass and a system of deep-ribbed metal louvers, representing a contemporary interpretation of the tile roof that used to symbolize the temple. The metal louvers appear to change their color and shape depending on the direction and intensity of the light that falls onto them—the slanted wall becomes an antenna of natural phenomena. The louvers rise up from the street level, allowing the city's activities to spill over into the building. The temple thus becomes an urban public space.

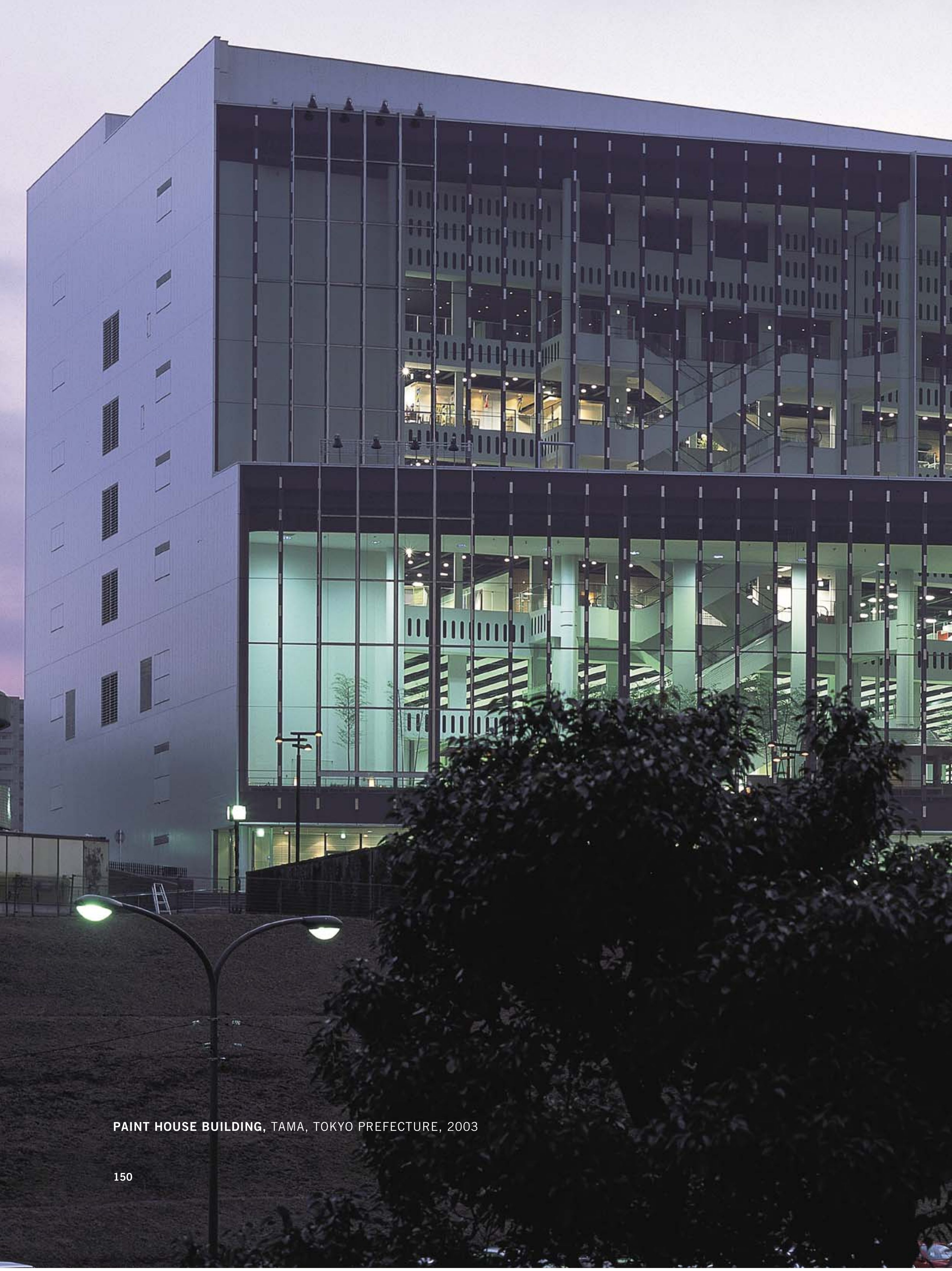
Inside the temple are three halls on three levels. The first-floor hall is used for concerts and can accommodate up to 350 people, serving as a community center for the neighborhood, while the others are smaller meeting spaces for formal and informal events and social gatherings. Interior partitions are made of backlit glass fiber-reinforced cloth, which is reminiscent of the traditional Japanese half-transparent *shôji* screens.





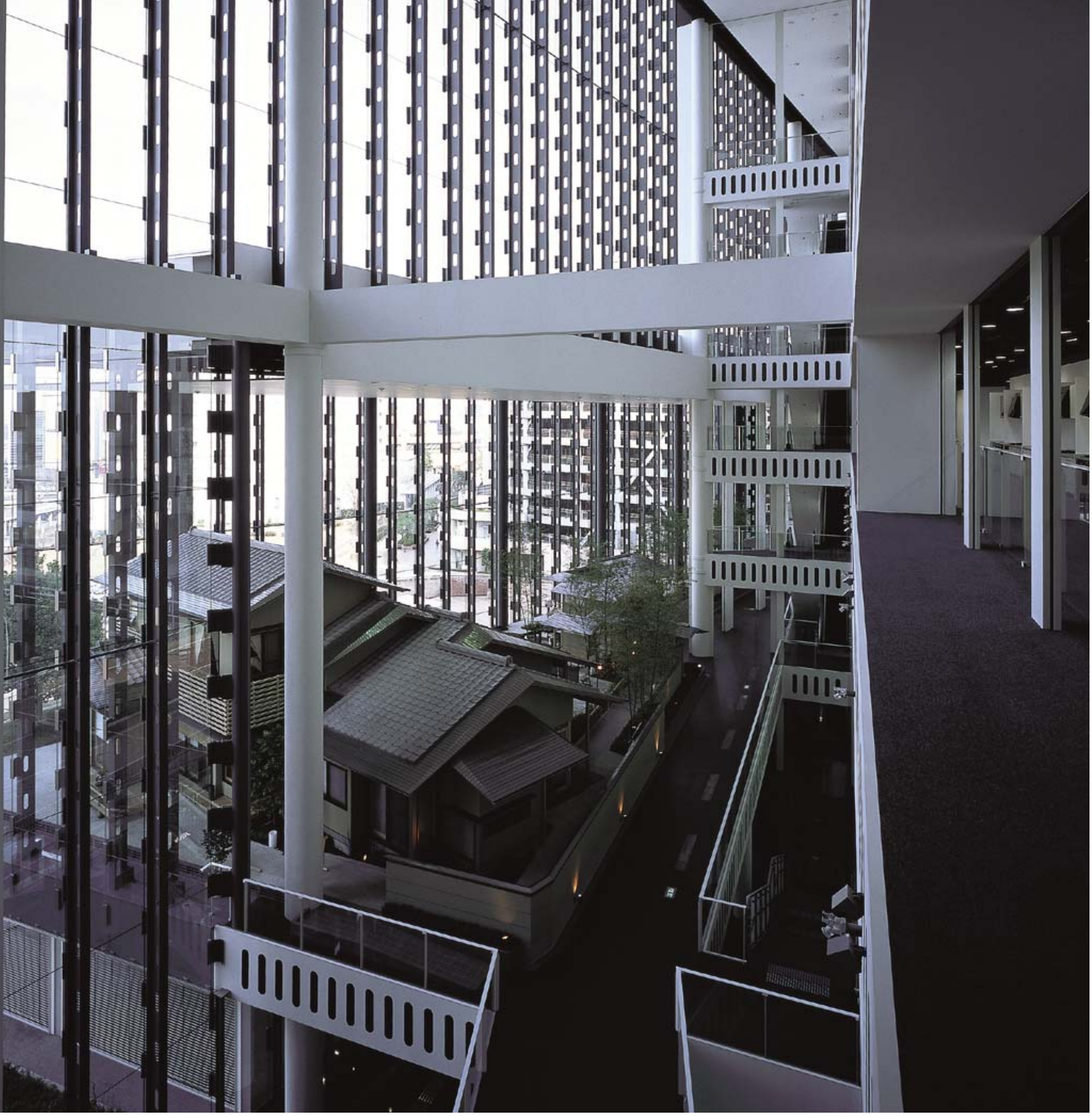
TOP / ELEVATION DETAIL
BOTTOM / ENTRANCE TO LOWER-LEVEL PUBLIC FACILITIES
OPPOSITE / VIEW OF SIDE ENTRANCE

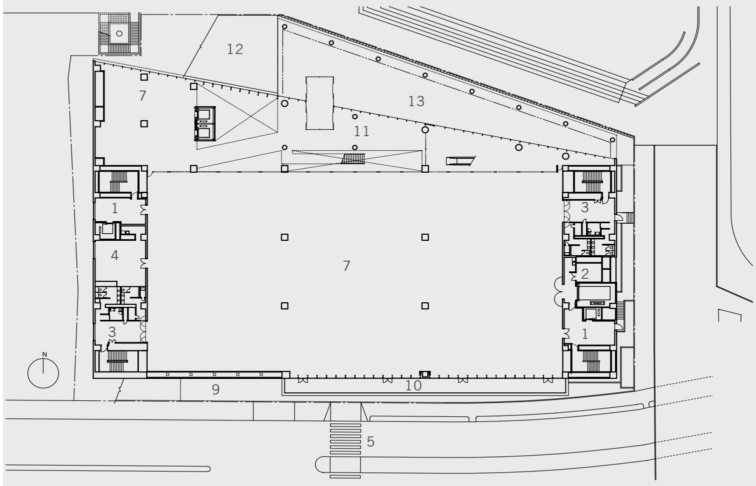
梅窓院　祖師堂



PAINT HOUSE BUILDING, TAMA, TOKYO PREFECTURE, 2003

ペンタ





TOP
PARTIAL VIEW OF EXHIBITION AREA

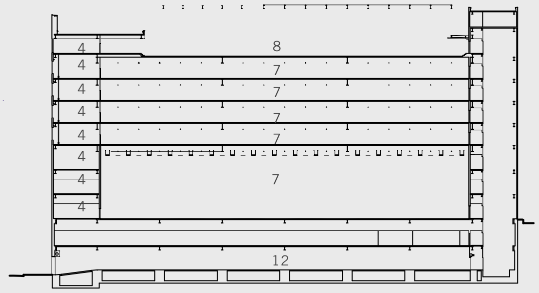
BOTTOM
FIRST-FLOOR PLAN

OPPOSITE TOP LEFT
LONGITUDINAL SECTION

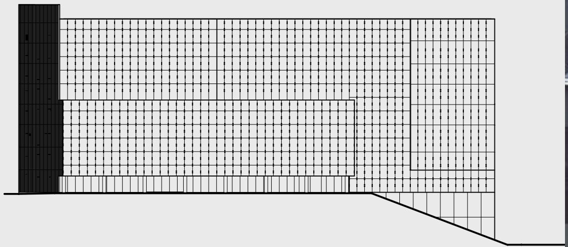
OPPOSITE MIDDLE LEFT
NORTH ELEVATION

OPPOSITE BOTTOM LEFT
SECTION

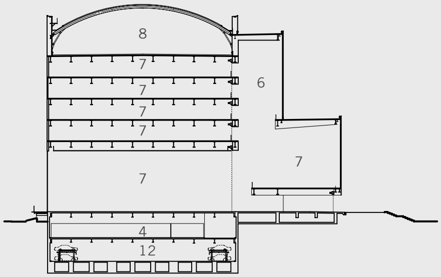
OPPOSITE RIGHT
DETAIL OF NORTH FACADE



LONGITUDINAL SECTION

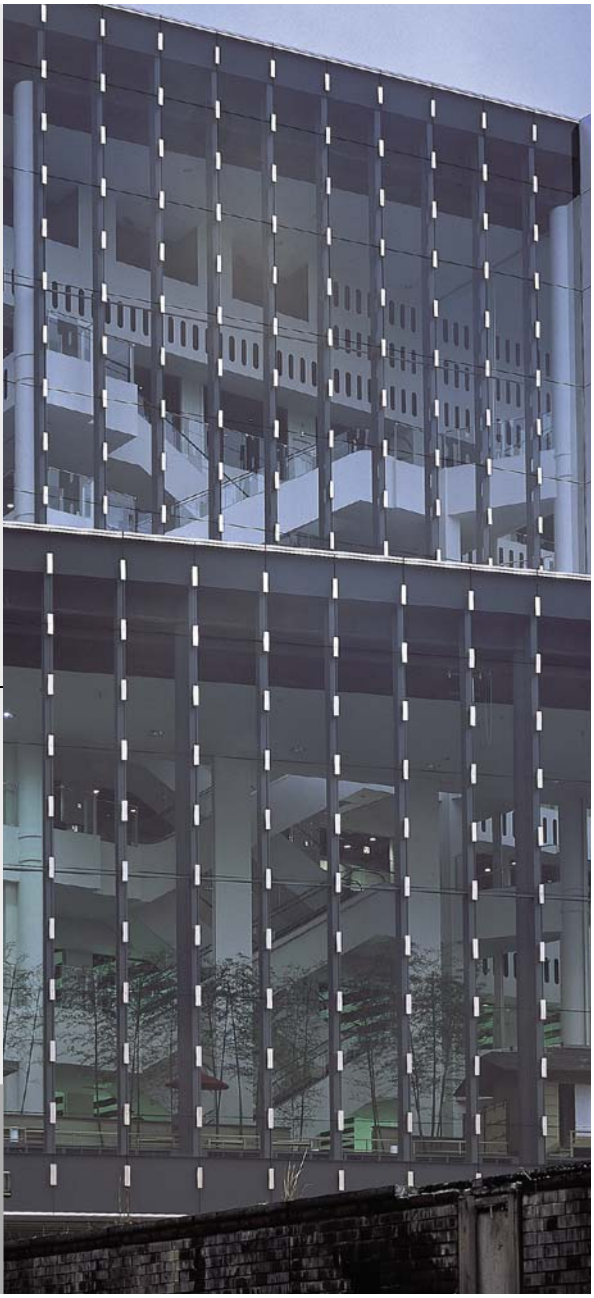


NORTH ELEVATION



SECTION

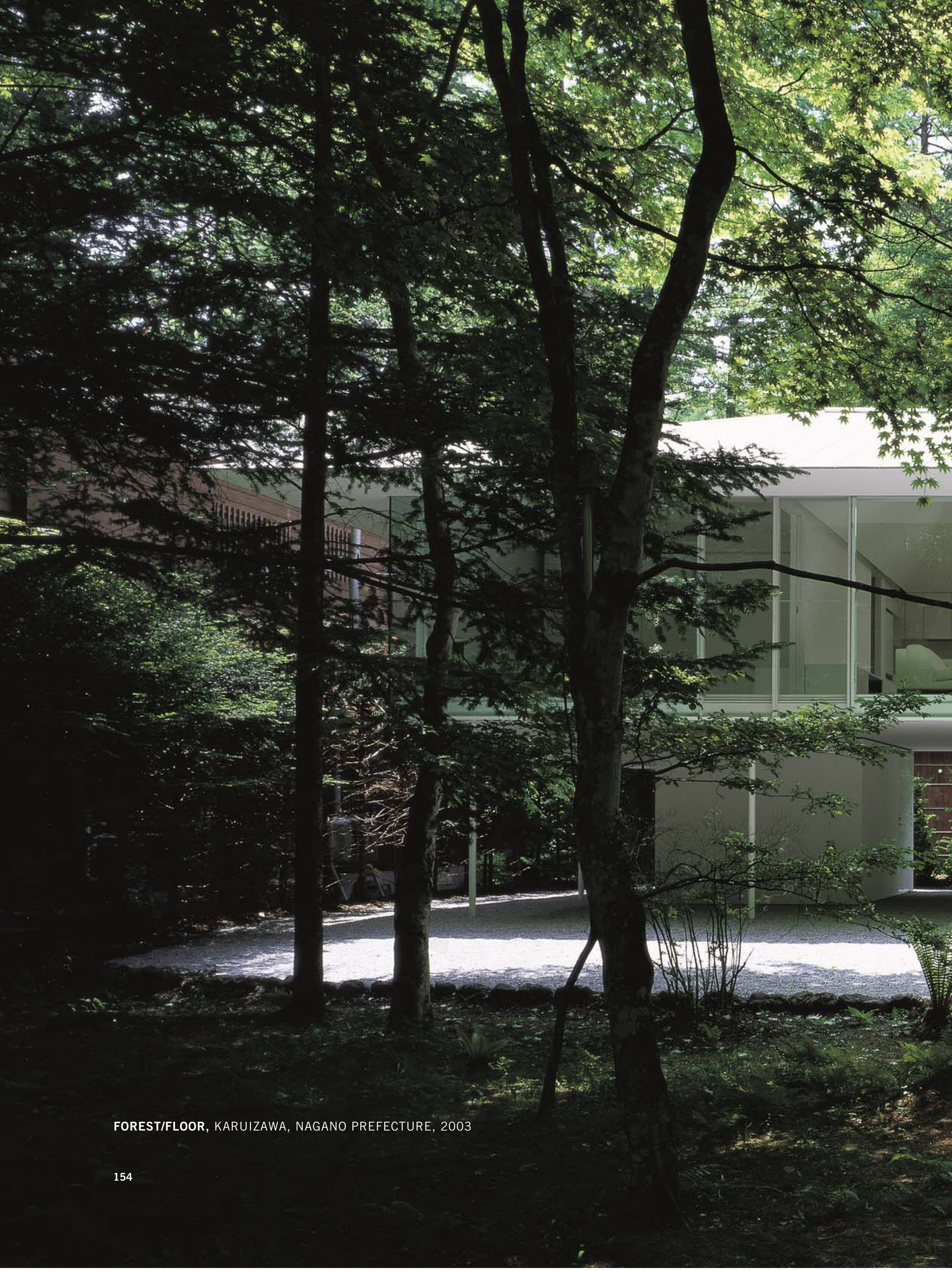
1 / LOBBY
2 / EQUIPMENT STORAGE
3 / ANTEROOM
4 / OFFICE
5 / BRIDGE
6 / VOID
7 / EXHIBITION AREA
8 / ROOF
9 / TREES/PLANTS
10 / TERRACE
11 / ENTRANCE HALL
12 / PARKING
13 / PILOTIS



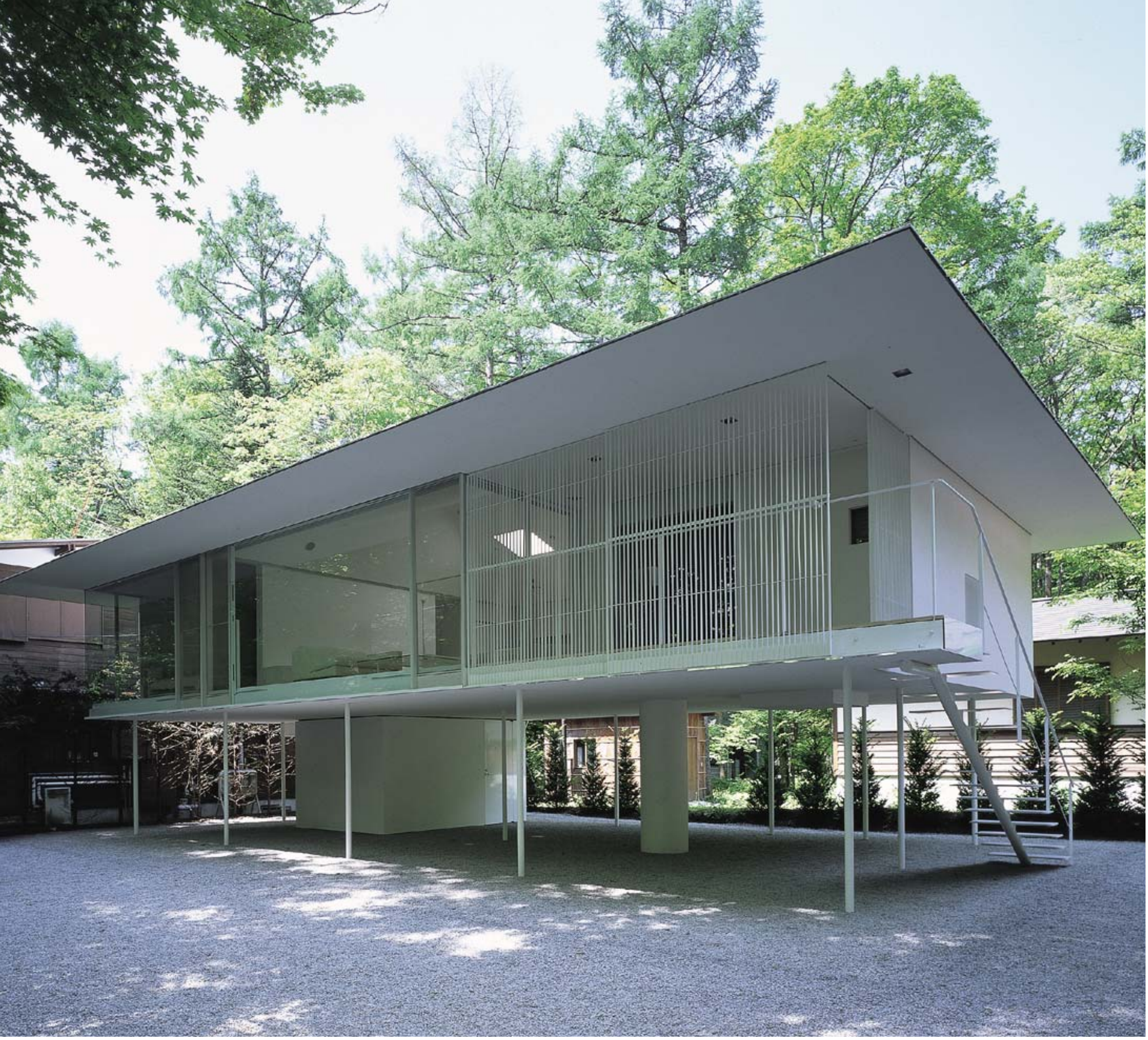
This large building is an exhibition space for twelve prefabricated model houses. The different models are juxtaposed in the interior of a glass box, which makes choosing among the alternatives easier for the customers. They can actually contribute to the design of their future residences by combining elements of various models.

In the past, ready-made houses were put on the market by gigantic prefabricated house manufacturers and their architects without allowing for individual involvement and variations. As buying a house is usually a once-in-a-lifetime event, Kuma considered it important to make the process as customer-friendly as possible, presenting with his project a new concept for marketing the houses as well as providing an appropriate exhibition space for this purpose.

The glass facade of the Paint House Building is designed to reflect the objects on sale in a unique way: the applied stainless-steel plate fittings divide the glass plates behind, transforming the facade into a kind of computer screen onto which the abstract images of the houses are projected. The uniform glass facade is given a speckled appearance by the ellipsoid holes that are punched in the steel structure, which supports the facade. The volume is thus transformed into a seemingly weightless structure.



FOREST/FLOOR, KARUIZAWA, NAGANO PREFECTURE, 2003

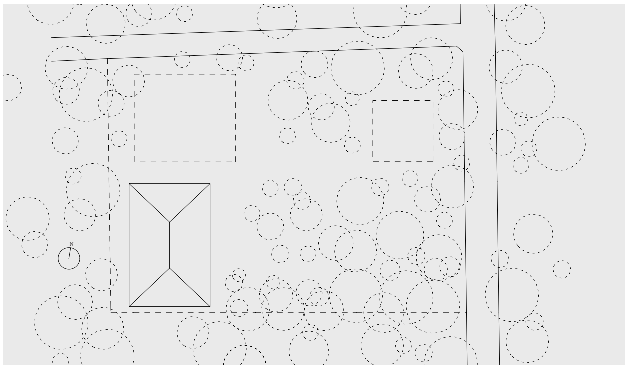


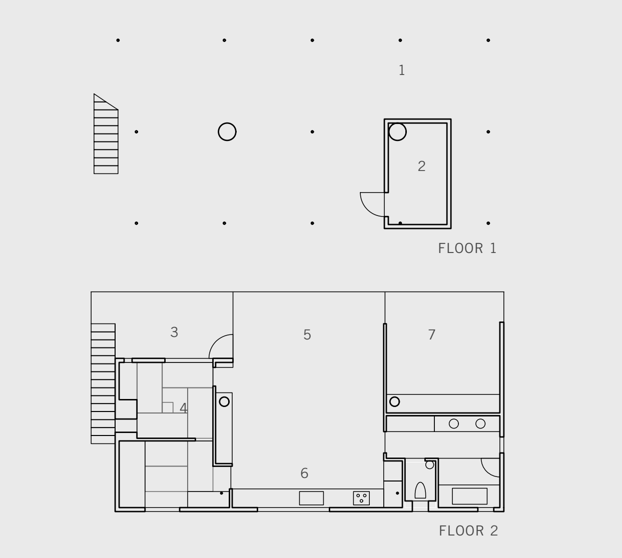
Located in one of Japan's most popular resort areas in the mountains of Nagano Prefecture, this small weekend house is surrounded by forest. Kuma's intention here was to create a building that floats among the trees, providing an impressive view of the abundant nature from a floor that is elevated 8.5 feet (2.6 meters) above the ground. Mies van der Rohe's Farnsworth House, which also features an elevated floor and exposure to nature, was a strong inspiration for the design.

The Farnsworth House is expressed as a glass volume with a steel-frame support that emphasizes the boxlike form. Kuma found this frame distracting, and therefore envisioned the floor itself as the main element of his design. In order to avoid the presence of structural columns in the living space, the floor is supported by thin steel posts located within the pilotis beneath and the umbrella-like roof is suspended from above. In this unique solution the extensive roof is supported by two major posts, cylindrical in shape, that are placed within enclosed cabinets, one in the kitchen and the other in the bedroom. They are thus invisible from inside the house.

At the same time, the glass wall facing the forest seems to disappear in the deep shadow that the roof casts onto the floor. As a result, the connection between inside and outside is not distracted by reflections, and residents can enjoy an intimate relationship with the nearby woods.

With the partitions and all other elements painted white, the space acquires an ephemeral, almost floating lightness. If Mies was determined to create a "transparent box," Kuma in this project attempted to invoke a "transparent experience."

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FLOOR 1
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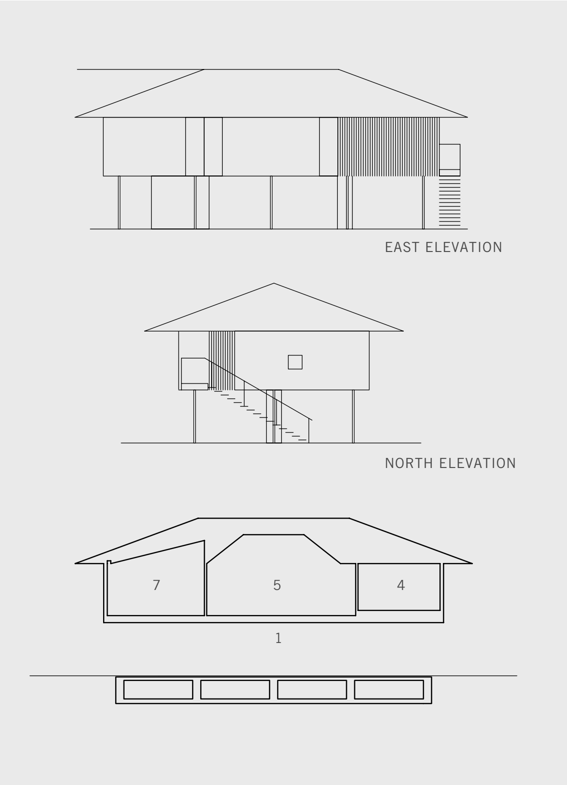
FLOOR 2


EAST ELEVATION
NORTH ELEVATION
7
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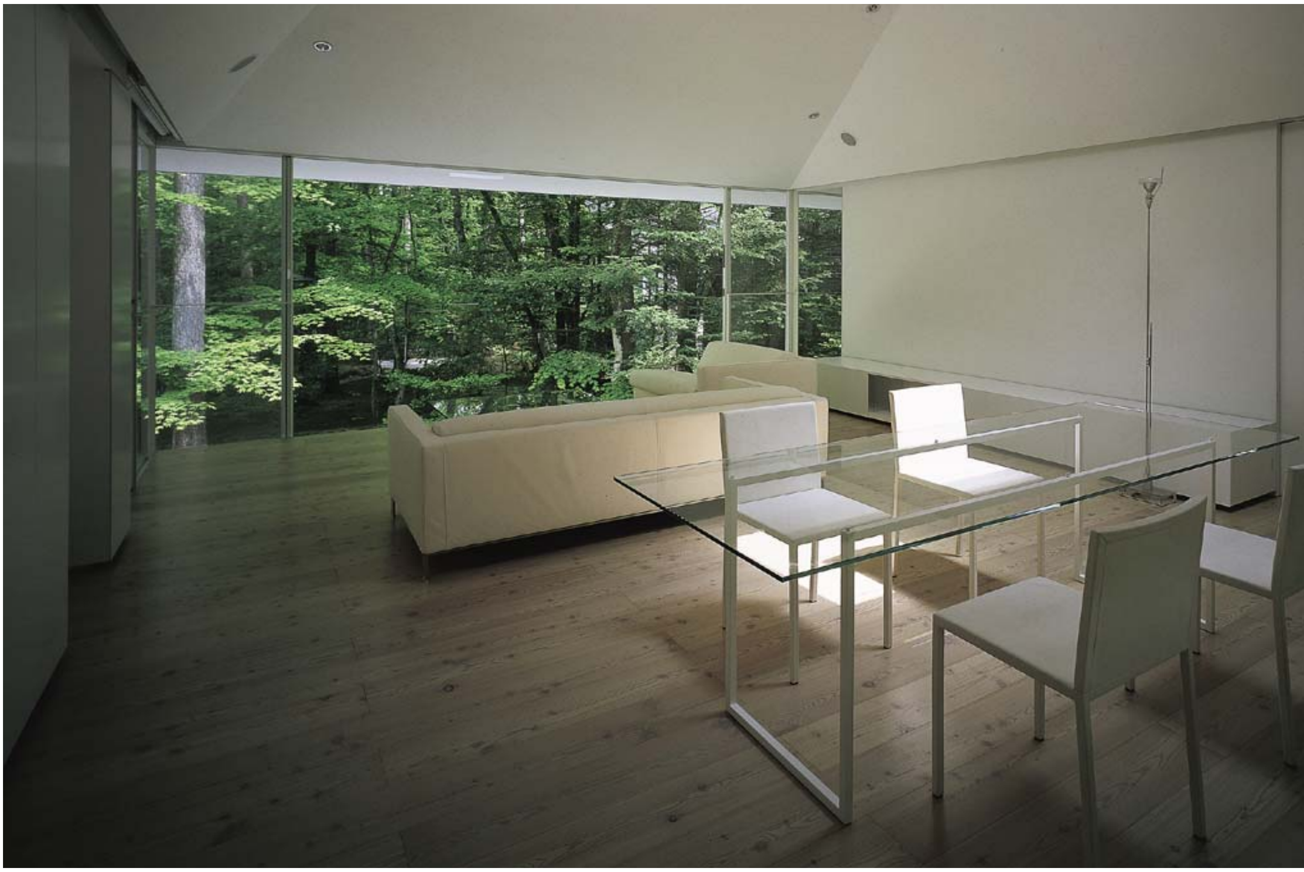
1 / PILOTIS
2 / STORAGE
3 / TERRACE
4 / TEAROOM
5 / LIVING/DINING ROOM
6 / KITCHEN
7 / BEDROOM

OPPOSITE / EXTERIOR VIEW FROM NORTHEAST
TOP LEFT / SITE PLAN
BOTTOM LEFT / FLOOR PLANS
TOP RIGHT / ELEVATIONS AND SECTION
BOTTOM / INTERIOR OF LIVING ROOM WITH VIEW OF THE FOREST

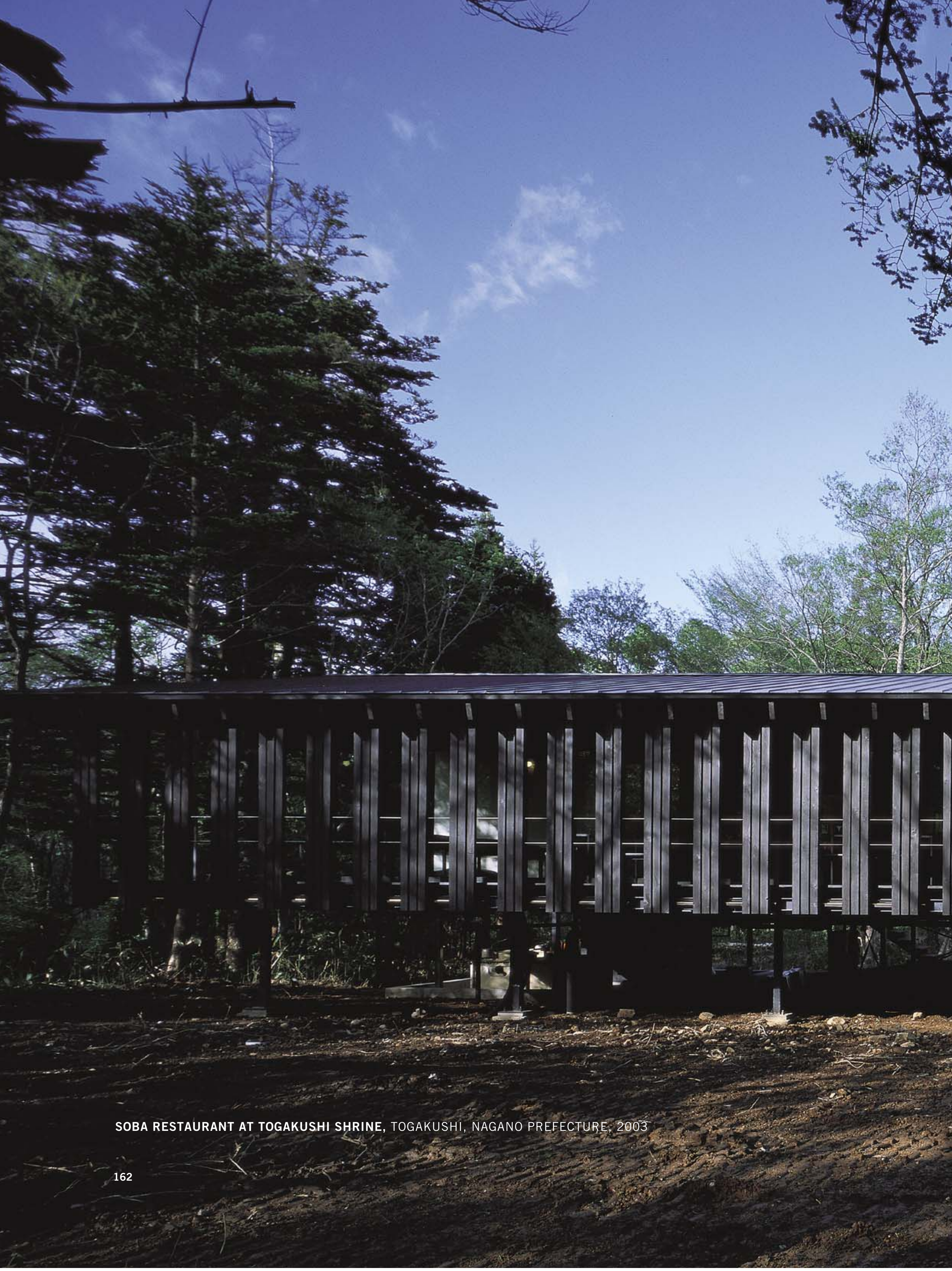


PREVIOUS PAGES
NIGHT VIEW FROM THE EAST

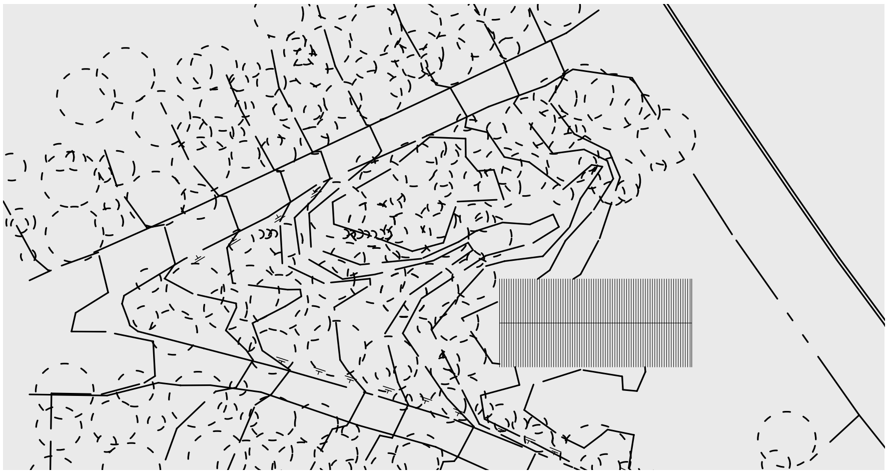
TOP
TERRACE WITH VIEW OF ENTRANCE

BOTTOM
EXTERIOR STAIRWAY

OPPOSITE
LIVING ROOM DETAIL



SOBA RESTAURANT AT TOGAKUSHI SHRINE, TOGAKUSHI, NAGANO PREFECTURE, 2003



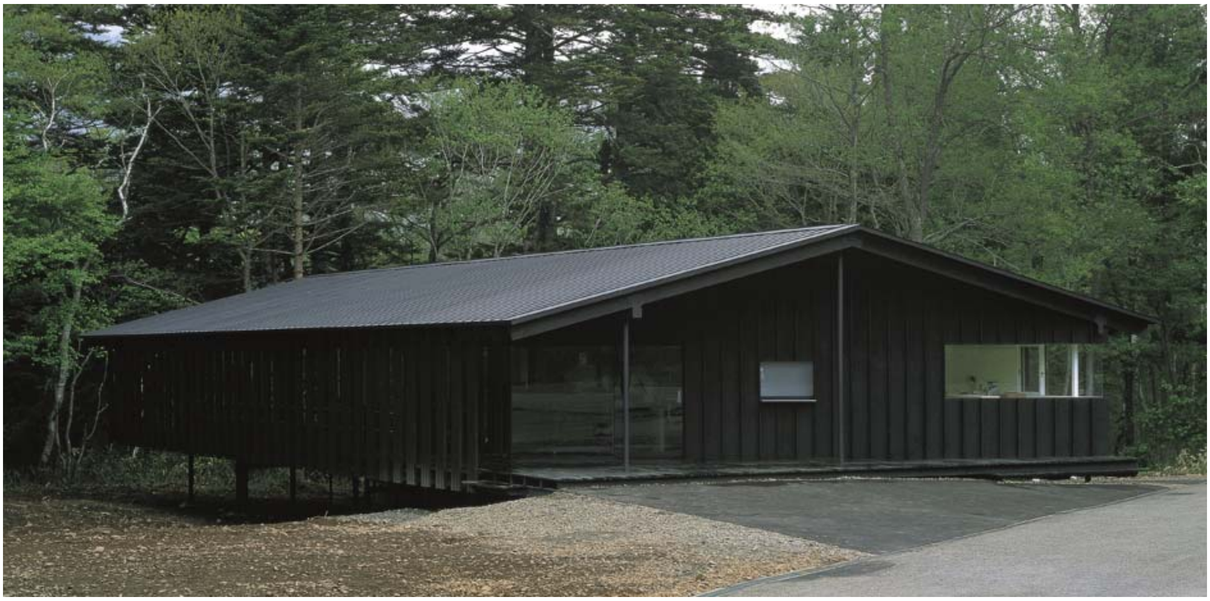
TOP
SITE PLAN

BOTTOM
EXTERIOR VIEW FROM SOUTHEAST

OPPOSITE TOP
FLOOR PLAN

OPPOSITE MIDDLE
ELEVATIONS

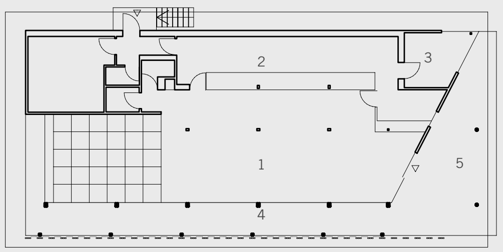
OPPOSITE BOTTOM
INTERIOR VIEW OF DINING AREA



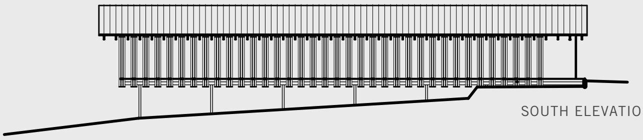
Togakushi Shrine is one of the most significant sacred places in Japan. It is not only at the center of the region but also forms the heart of the Shinto religion, which considers Mount Togakushi sacred. The extreme verticality of the mountain stands in stark contrast to the horizontality of the approach to the shrine, a straight path with a Japanese noodle restaurant at its beginning. Kuma was commissioned by the Shrine authorities to design a new facility to replace the old restaurant, which was fast deteriorating.

In the given setting, the architecture becomes part of the approach to the shrine, a condition that has been further reinforced by Kuma's design. The one-story, pitched-roof building is placed diagonally to the path, emphasizing the importance of the path rather than the presence of the built structure. Due to the low height of the eaves, made possible by the gabled roof, the outer walls seem to blend into the surrounding environment. The depth of joist here had to be greater than that of the similarly structured Museum of Ando Hiroshige as the roof has to carry the weight of accumulating snow in the winter. But by bearing the joists on a steel frame Kuma once again managed to create vertical surfaces that appear weightless, made up of wooden panels.

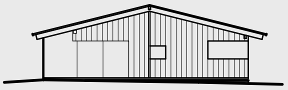
The horizontally stretching building was designed with a simple plan. Most of the interior, shaped in wood with a rustic quality, is occupied by the guests' seating area, which overlooks green fields in front. In the back are the kitchen, space for noodle making, and other service facilities.The building is fronted by a covered porch and a long terrace. Special attention was given to the design of the outside terrace wall; from inside of the restaurant the ends of its evenly spaced vertical louvers are invisible, as they are abruptly cut off below the floor of the elevated terrace. As a result the division between the architecture and the surrounding environment is de-emphasized by an easy spatial flow. This correlates to the movement on the site and beyond—the continuous spatial sequence of approaching the shrine.



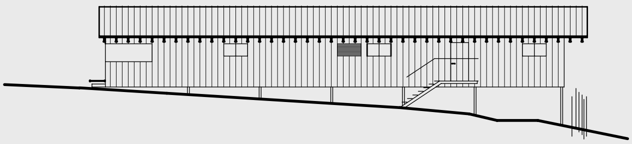
1 / GUEST SEATING
2 / KITCHEN
3 / SOBA FABRICATION SPACE
4 / TERRACE
5 / PLAZA



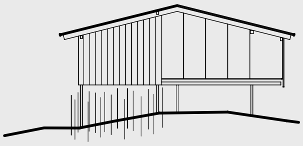
SOUTH ELEVATION



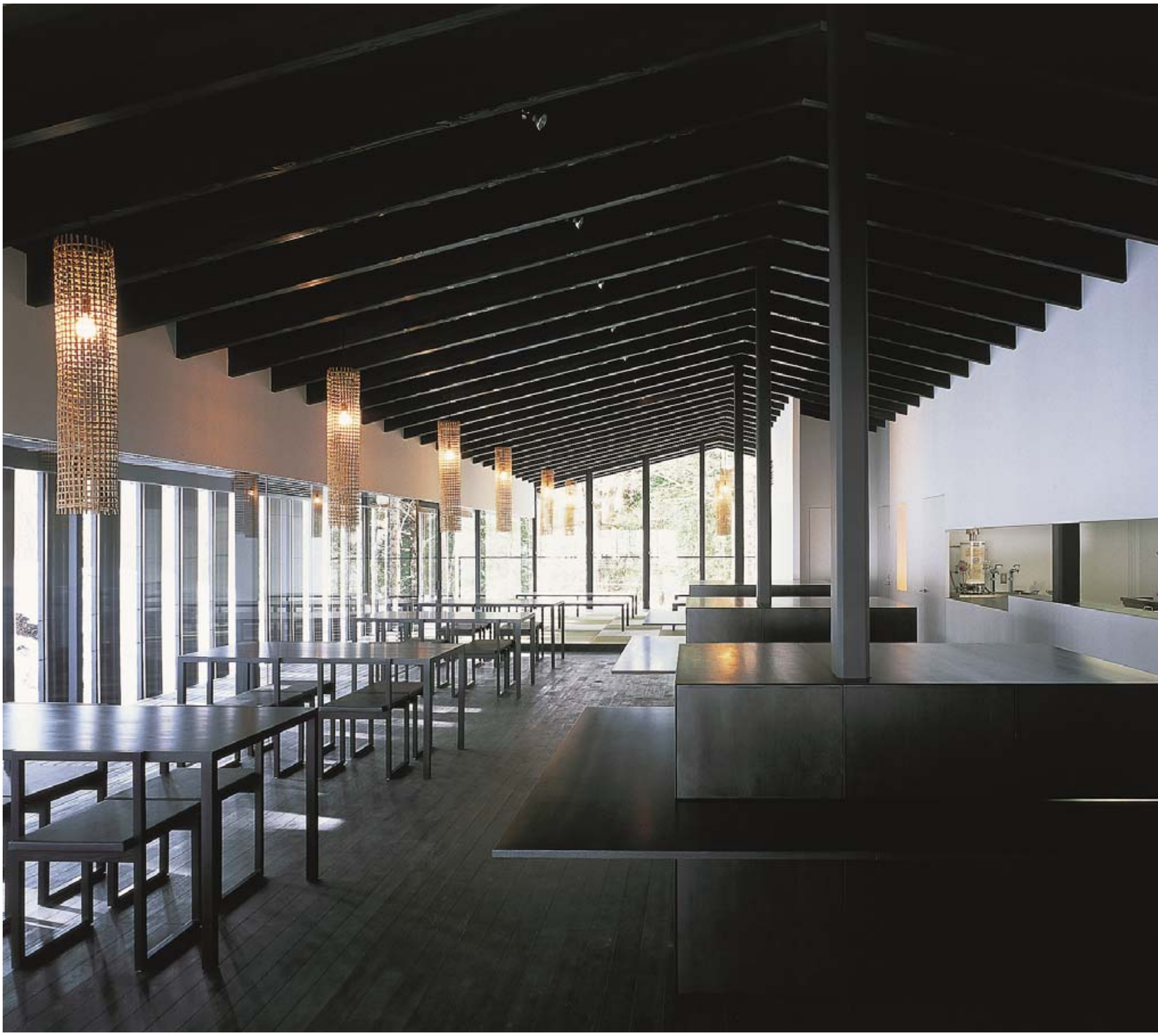
EAST ELEVATION

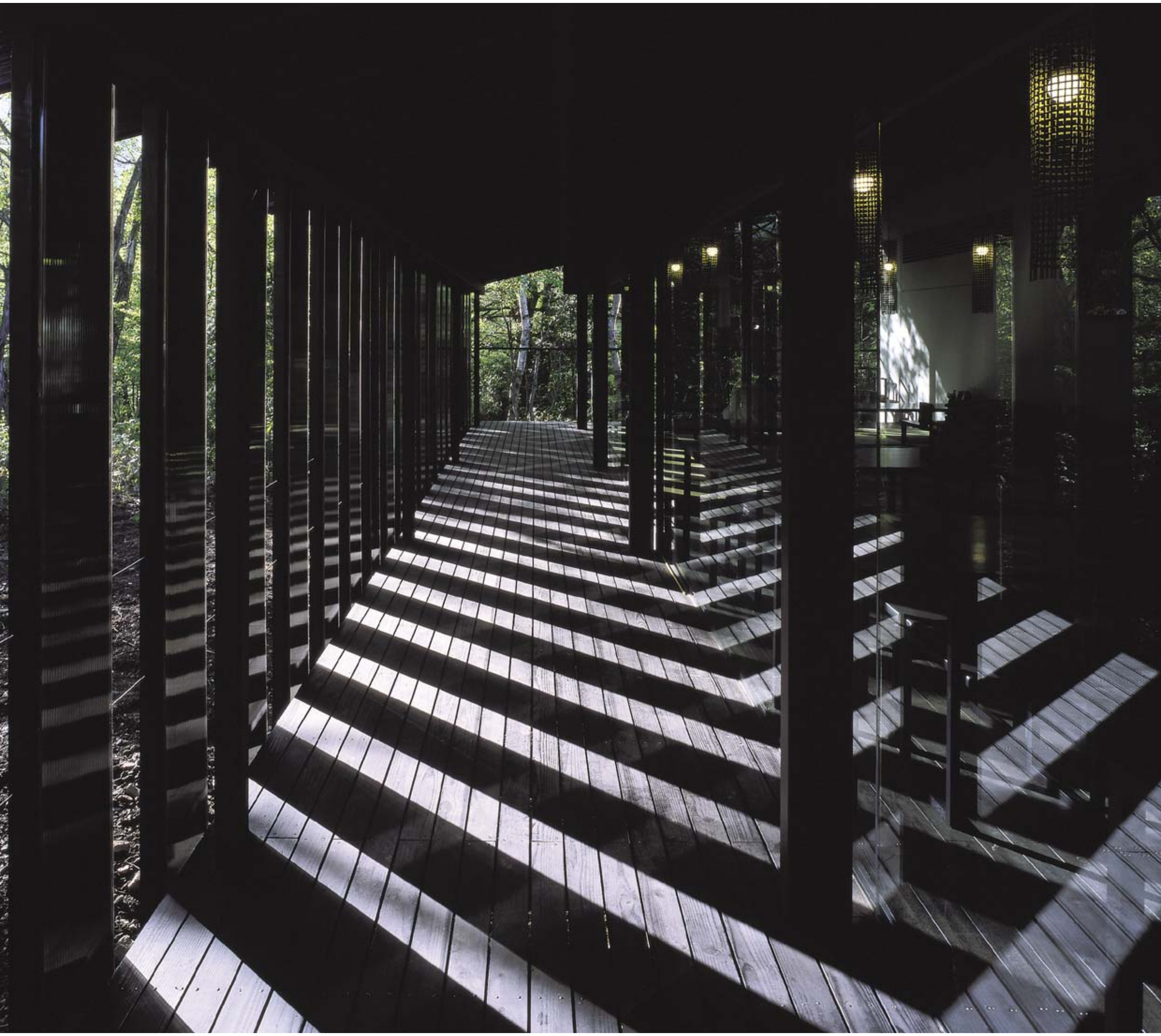


NORTH ELEVATION

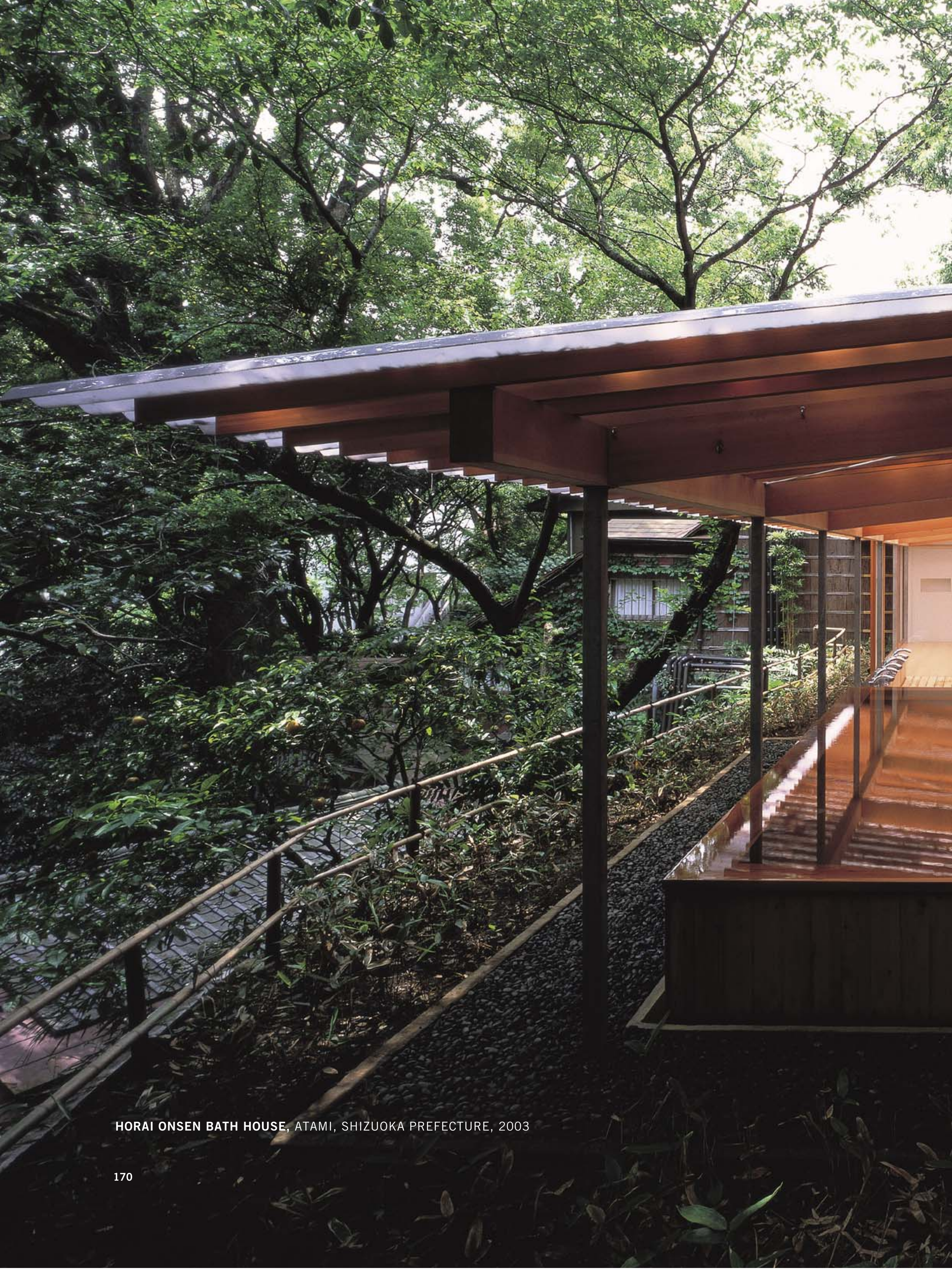


WEST ELEVATION

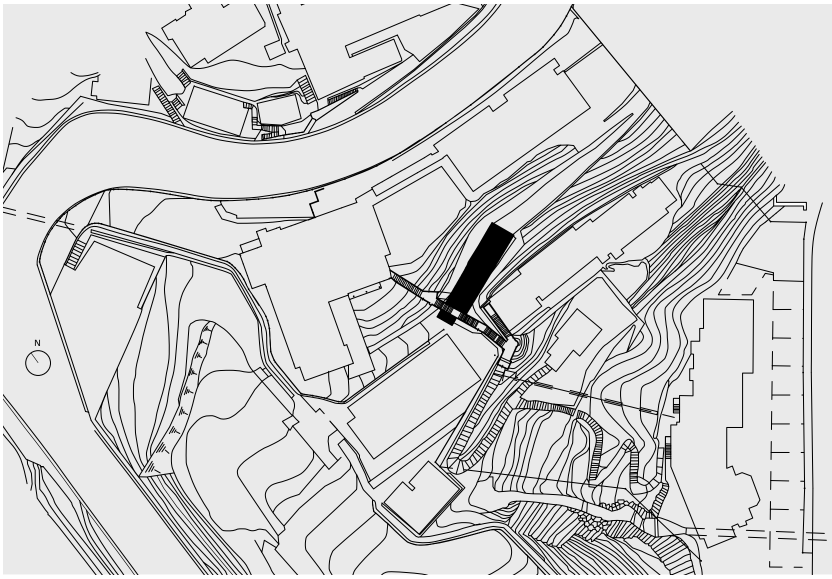




PREVIOUS PAGES / VIEW OF MAIN (SOUTH) FACADE
OPPOSITE TOP / INTERIOR DETAIL OF DINING HALL
OPPOSITE BOTTOM / EXTERIOR DETAIL OF SOUTH FACADE
ABOVE / VIEW OF TERRACE



HORAI ONSEN BATH HOUSE, ATAMI, SHIZUOKA PREFECTURE, 2003



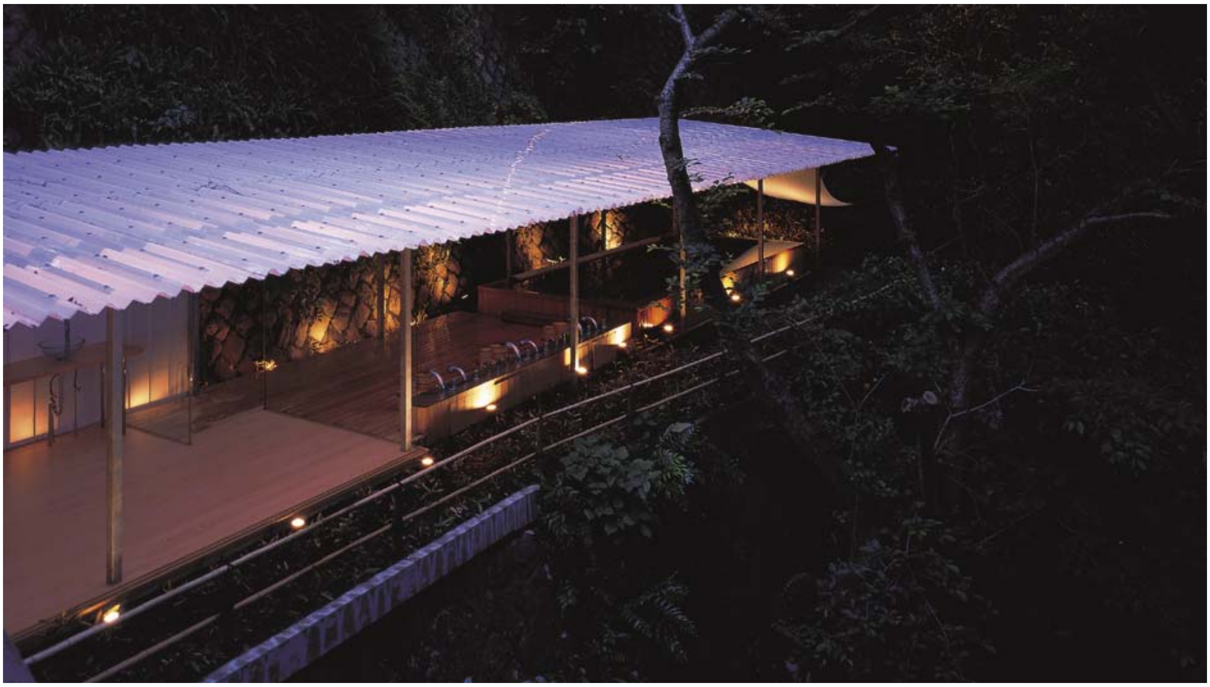
TOP
SITE PLAN

BOTTOM
VIEW FROM THE SOUTH

OPPOSITE TOP
FLOOR PLAN

OPPOSITE MIDDLE
SECTIONS

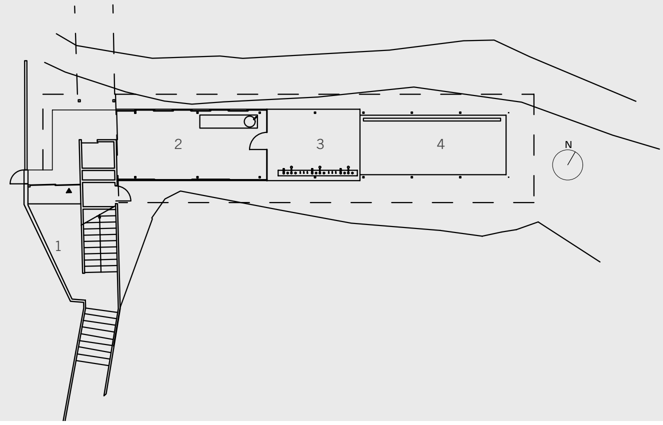
OPPOSITE BOTTOM
VIEW FROM THE NORTHEAST

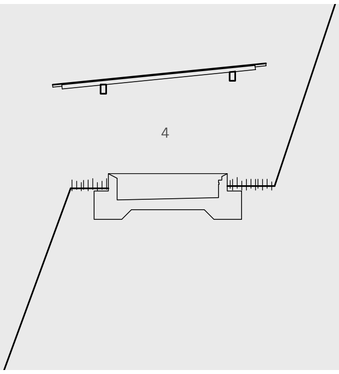


This bathhouse is located on the narrow ledge of a steep site within the property of Horai, a prestigious and well-known traditional Japanese hotel. The ledge is so narrow that it seems almost impossible to build anything there. Kuma took advantage of this condition, however, and derived the architecture of the bathhouse from it. Due to the narrow site, the structure is situated close to its surroundings, bordering on the rising cliff on one side and the precipice on the other. The project accordingly evolved along an extruded plan with activities arranged in a linear fashion.

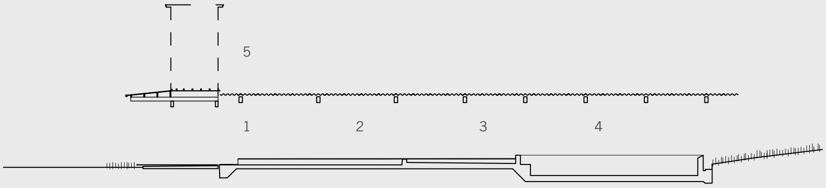
As is often the case with Japanese bathhouses, the pool as well as all other facilities except the locker room are outdoors to provide the benefit of being in nature while enjoying the soothing experience of the hot mineral bath. Kuma's bathhouse is in fact nothing more than a wooden deck or floor covered by a corrugated and translucent polycarbonate canopy that hovers over it like a tent; there are no walls or other outside boundaries. Even the washing faucets and hand-showers are arranged individually on top of the deck with mobile cases to hold towels and other necessary items. The 2.37-inch (60-mm) square steel columns that support the canopy are painted with galvanized gray paint, which effectively blends them into the background.

The Horai Onsen Bath House is—both by the nature of its function and its architectural design—certainly Kuma's most minimalist and ephemeral design to date.



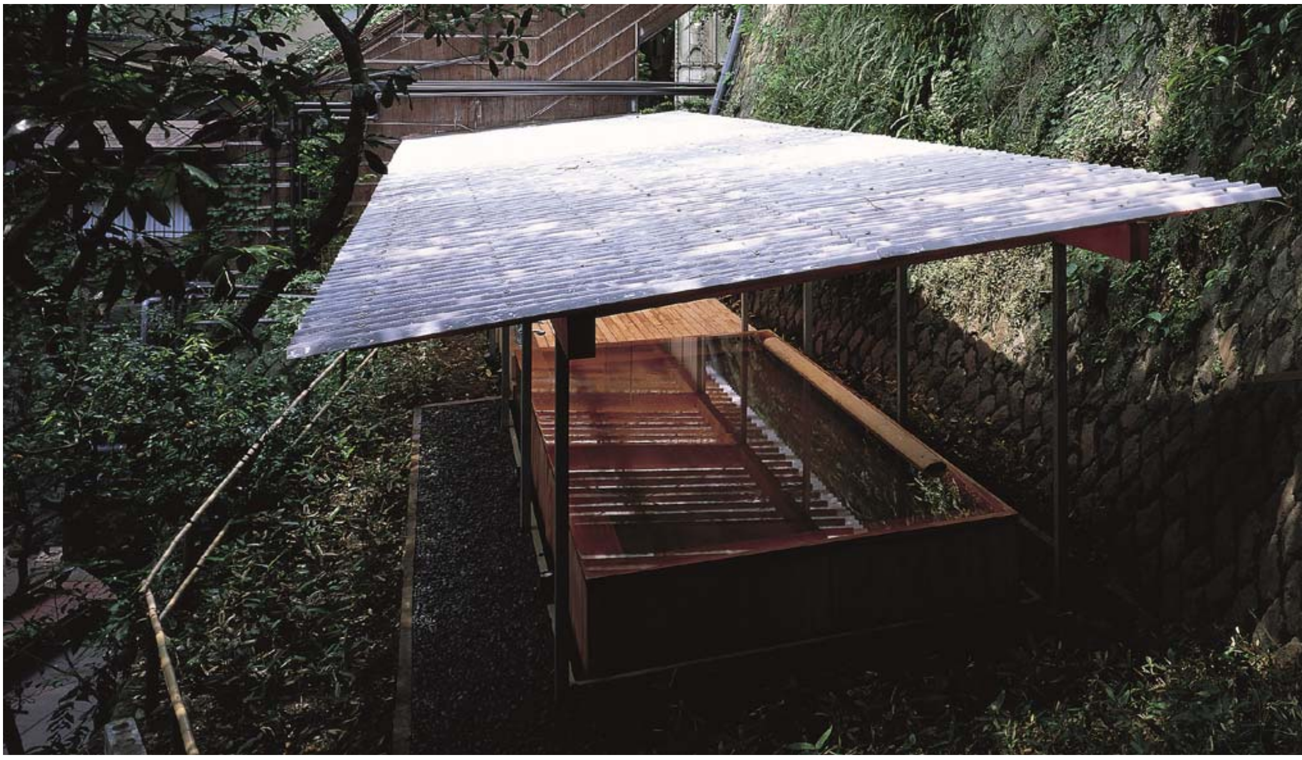


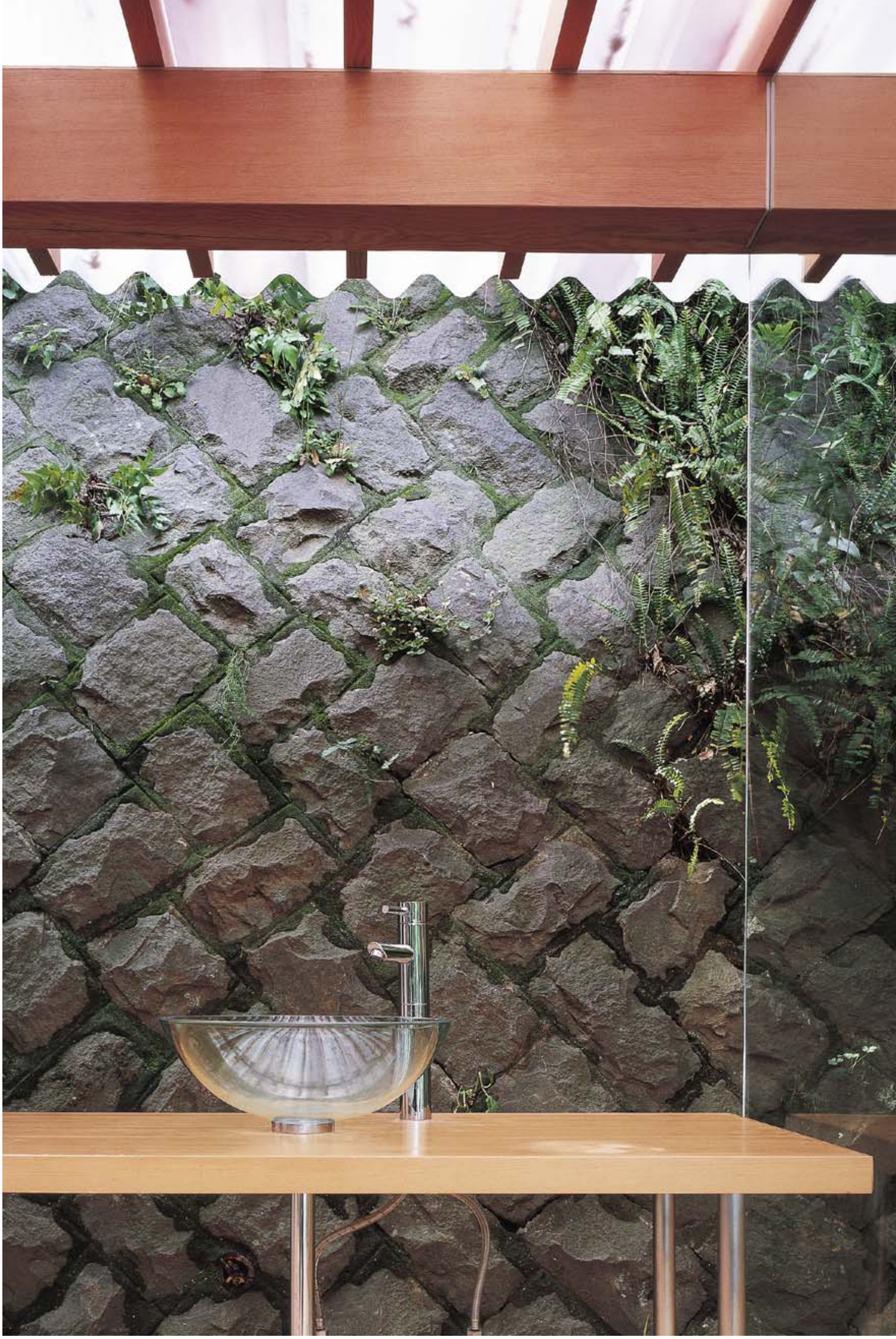
CROSS SECTION



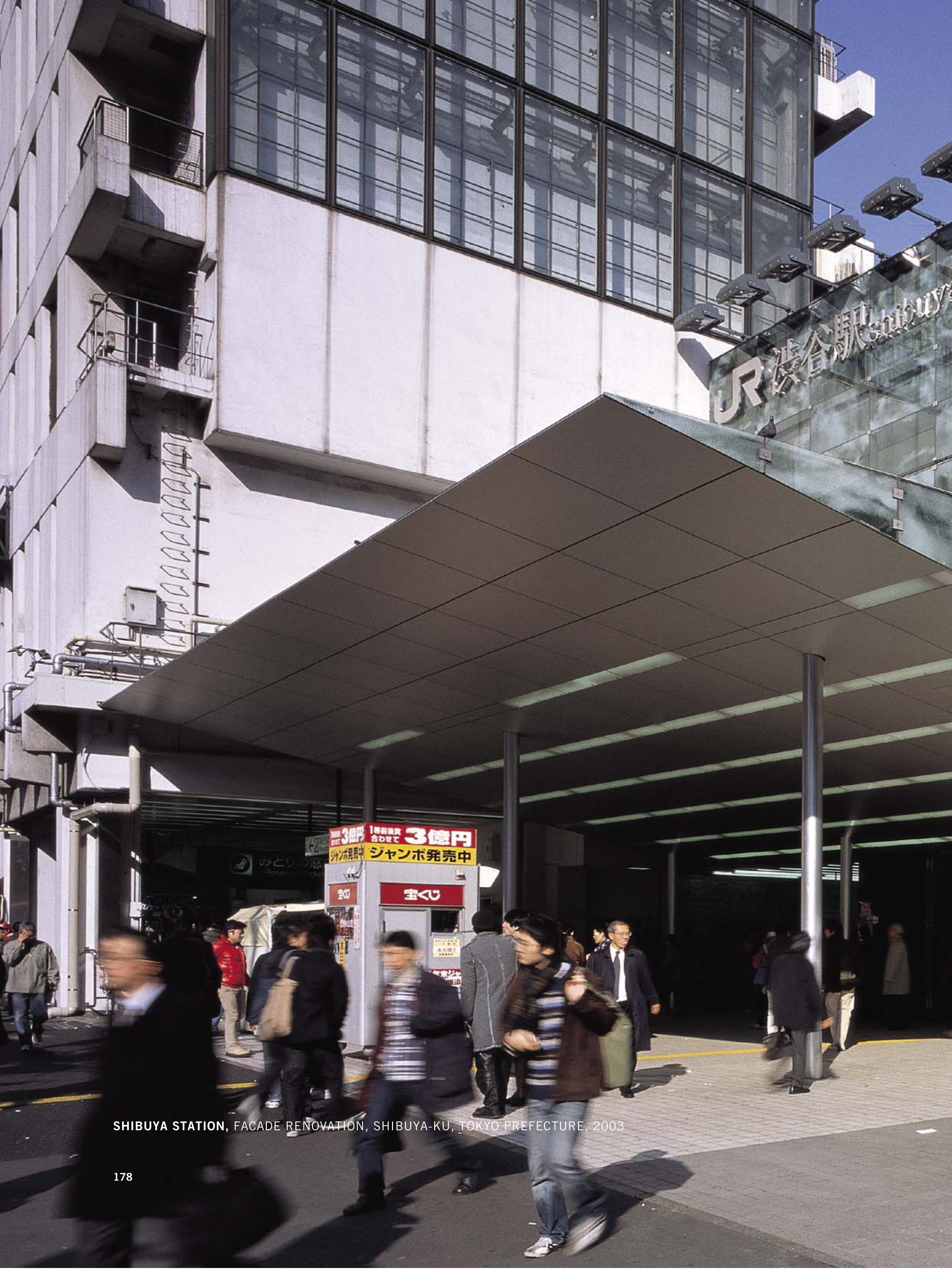
LONGITUDINAL SECTION

1 / ENTRY
2 / WAITING/CHANGING ROOM
3 / WASHING AREA
4 / BATH
5 / EXISTING STAIR





PREVIOUS PAGES / VIEW OF POOL UNDER TRANSLUCENT CANOPY
OPPOSITE TOP / EVENING VIEW
OPPOSITE BOTTOM / VIEW OF "INTERIOR" FROM ENTRANCE
ABOVE / DETAIL WITH GLASS WASHBASIN


JR 渋谷駅 shibuya
3億円
1等前後賞合わせて 3億円
ジャンボ発売中
ジャンボ発売中
宝くじ
宝くじ
みどりの窓口
Reserved Tickets

SHIBUYA STATION, FACADE RENOVATION, SHIBUYA-KU, TOKYO PREFECTURE, 2003

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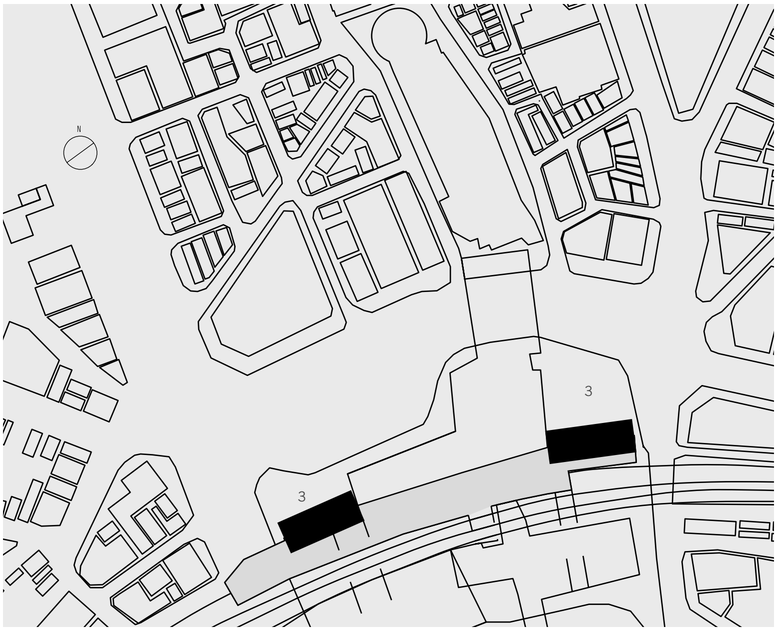
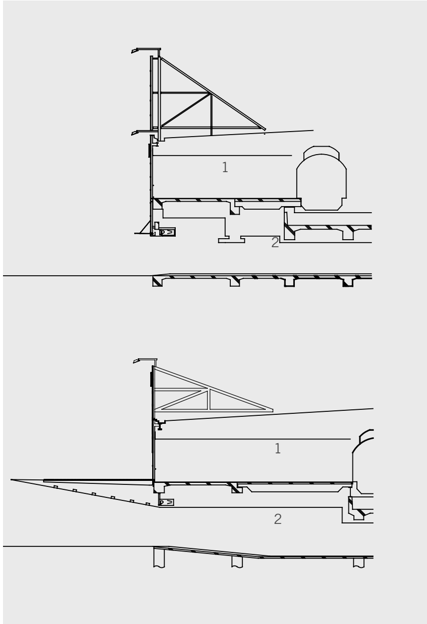
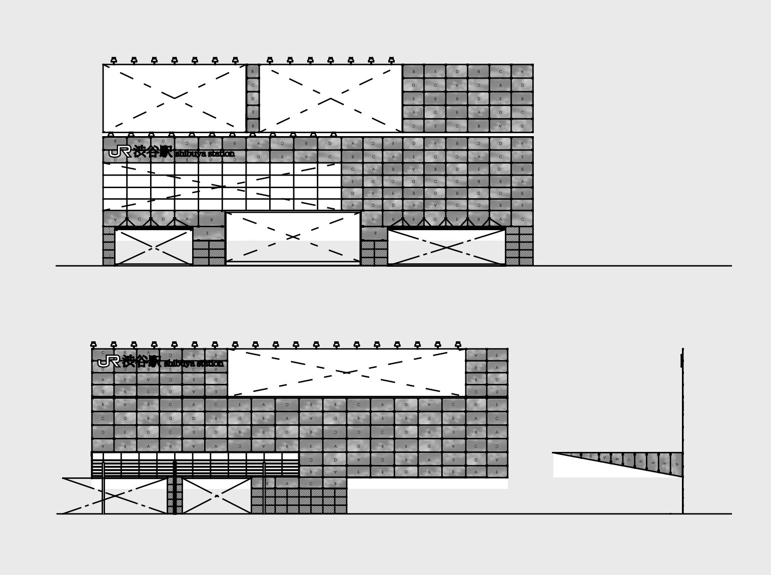
tion





1 / PLATFORM
2 / CONCOURSE
3 / PLAZA



TOP LEFT
SITE PLAN

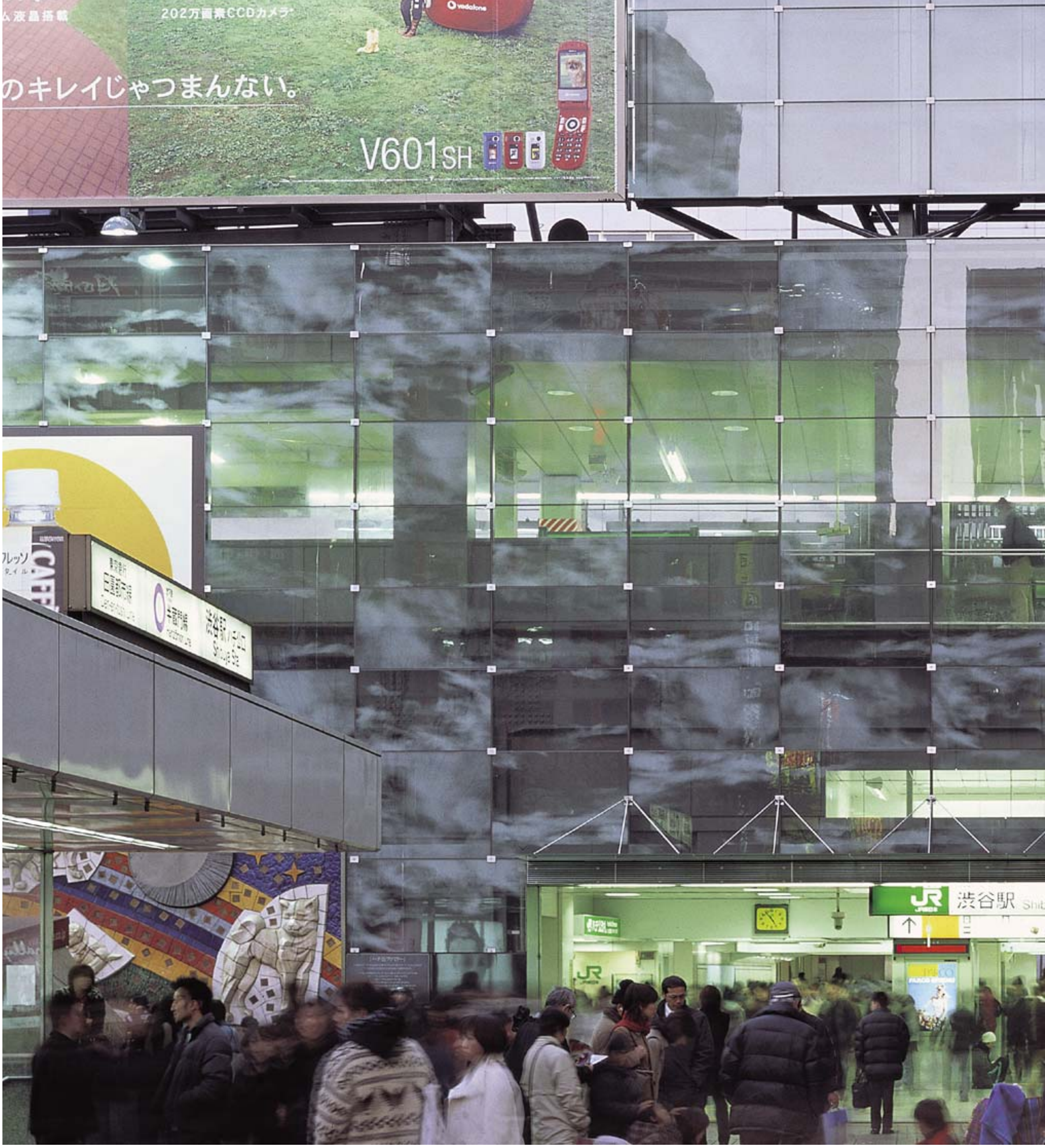
TOP RIGHT
SECTIONS

BOTTOM
NORTH AND SOUTH ELEVATIONS

OPPOSITE
DETAIL OF NORTH FACADE

The Shibuya Station in Tokyo is an area popular with the younger generation, Japanese and foreigners alike. Here students meet after school, roaming around and squatting on the street. This is an area of chaos, boisterous energy, and sensory overload; the streets are filled with innumerable multistory television screens, animated images, neon signs, and billboards so that the usual distinction between architecture and advertisements has all but lost its meaning. At Shibuya, as in many other parts of the city, it is difficult to tell apart material objects from non-material entities, and by extension, reality from fiction. In this urban environment everything is dissolved into a formless or liquid mass of insubstantiality.

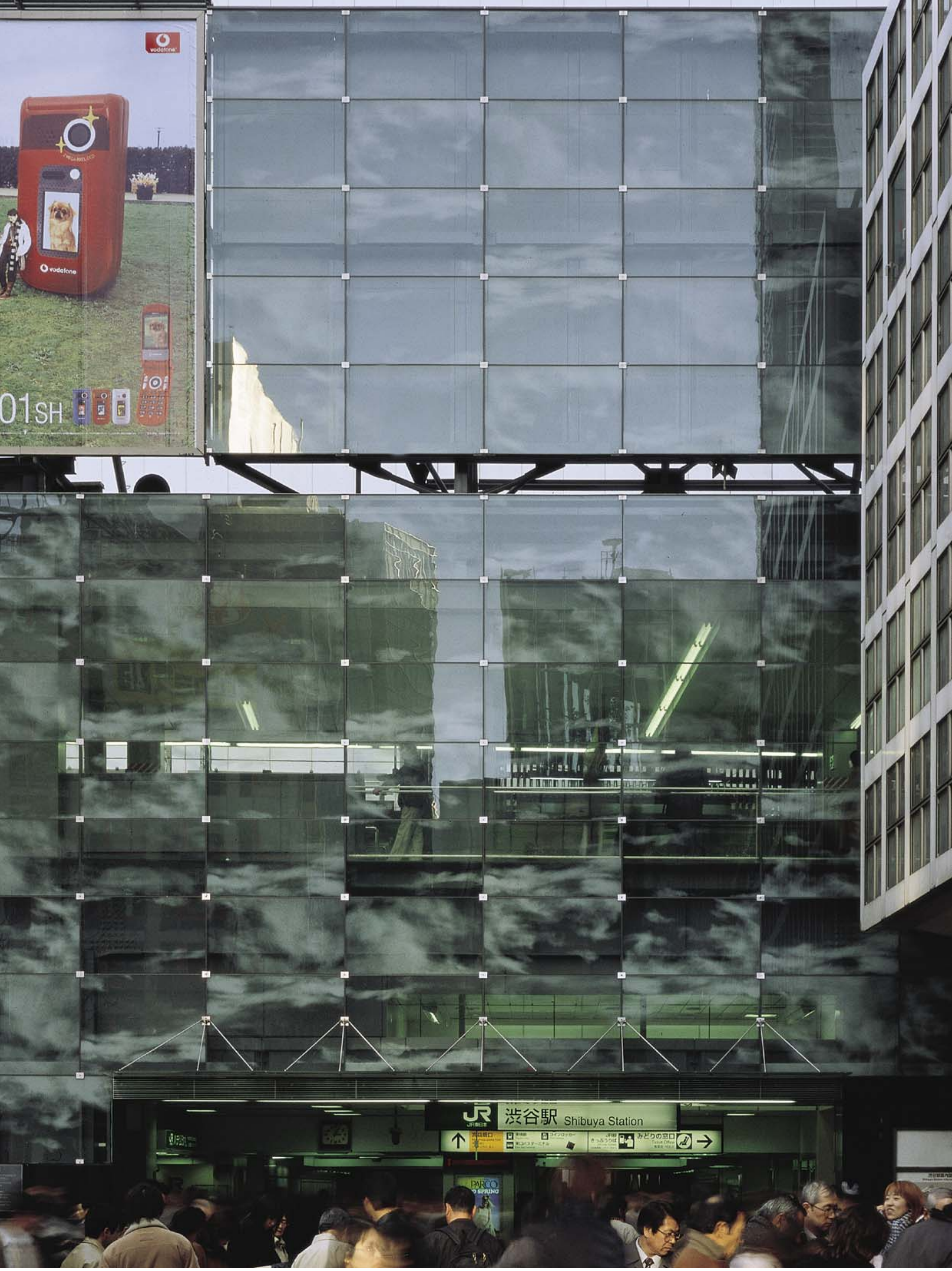
Given the task of redesigning the blank, nondescript elevations of the large station, Kuma covered the lower parts of the building with sheets of glass that possess the same liquid and transparent quality characterizing Shibuya's unreal surroundings. Intending to erase the architecture as much as possible, he transcribed images of clouds on the surface of the glass: using a digital camera, the architect took pictures of clouds over the station and then printed them on the glass as ceramic prints. The actual clouds that are reflected in

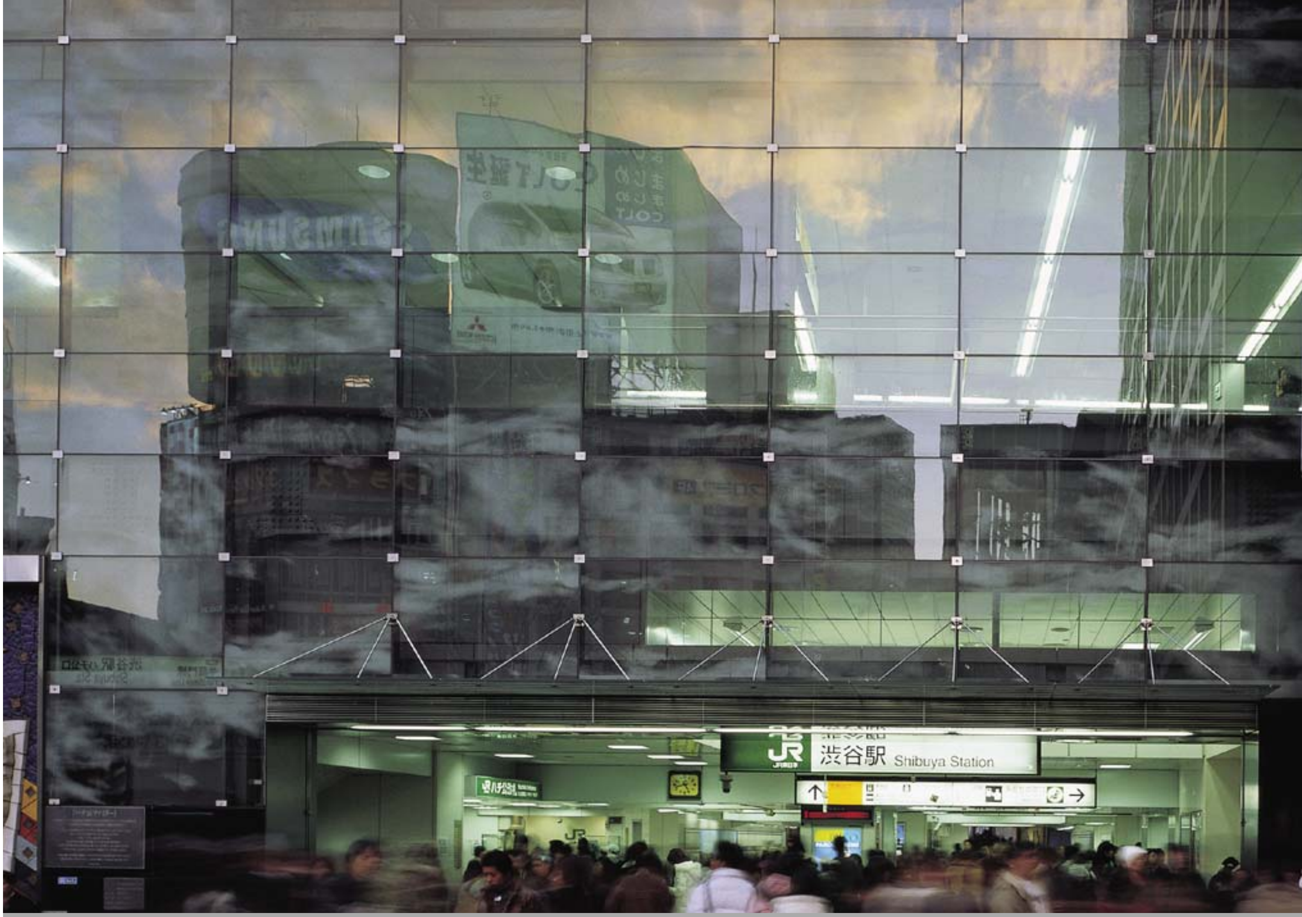


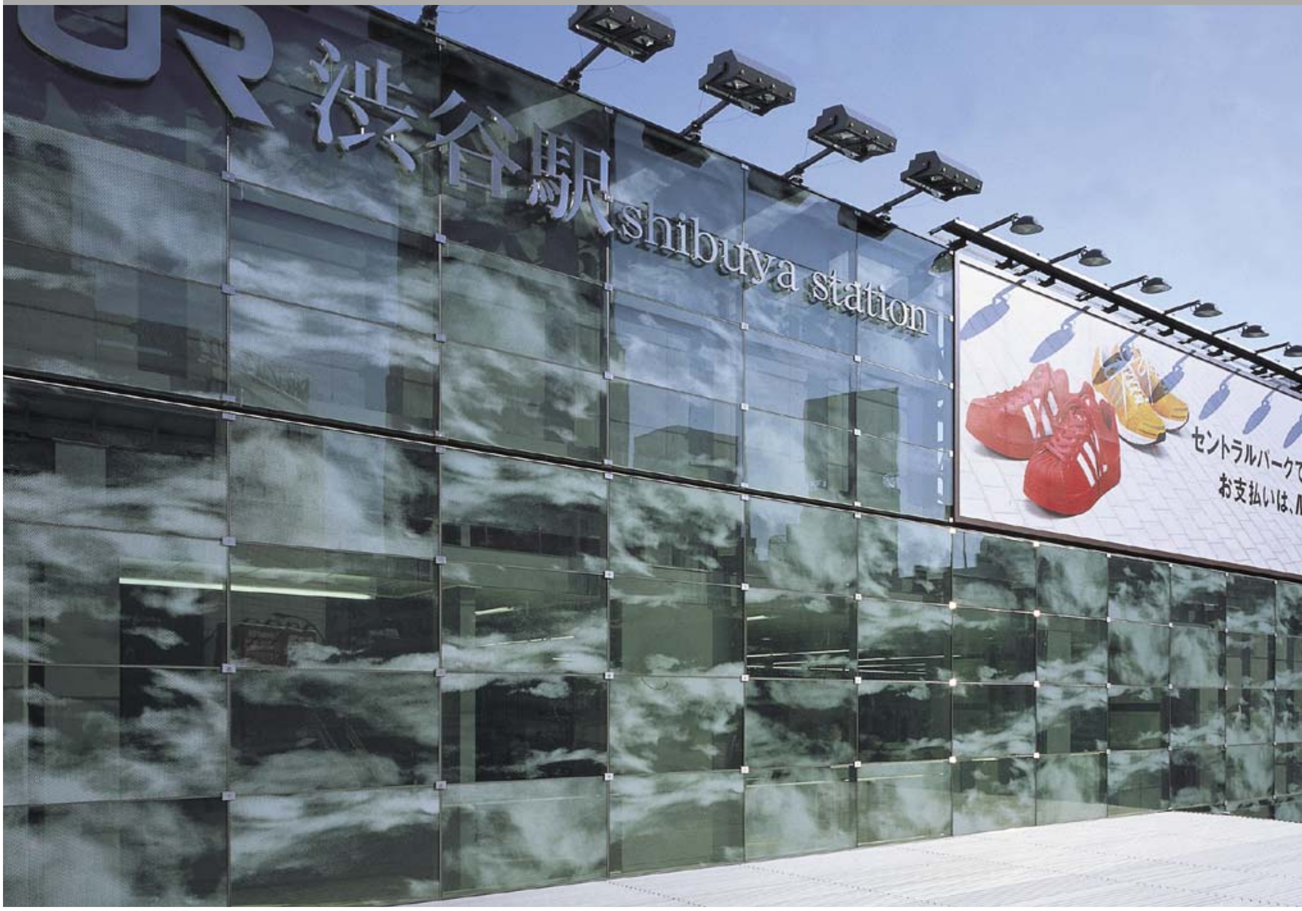
the glass are superimposed on these printed images of clouds, resulting in a state of profound ambiguity; at first glance it is hard to tell which clouds are printed and which reflected.

Kuma initially planned to print a huge cloud over the entire facade. Ultimately he used five parts of a single image, shuffled them, and then scattered them randomly over the facade. He felt that this digital, discontinuous approach was more in tune with Shibuya's culture. Similarly, making the ceramic prints, he first tried to achieve as accurate a reproduction of the clouds as possible, creating a prototype with small dot size. In the end, however, he enlarged the diameter of the dots to .5 inches (12 mm), as the increased dot size seemed to better capture the cool atmosphere of Shibuya.

The images are printed in black and white on three layered sheets of glass with a .25-inch (6 mm) gap between the glass panes. These gaps create a unique effect: when the observer's perspective changes, the cloud's shape and color changes as well. The result of Kuma's approach is a facade that hangs in mid-air between the real and the virtual.


vodafone
vodafone
01SH
JR
渋谷駅 Shibuya Station
みどりの窓口
PARCO


渋谷駅 Shibuya Station


JR
渋谷駅
shibuya station
セントラルパークで
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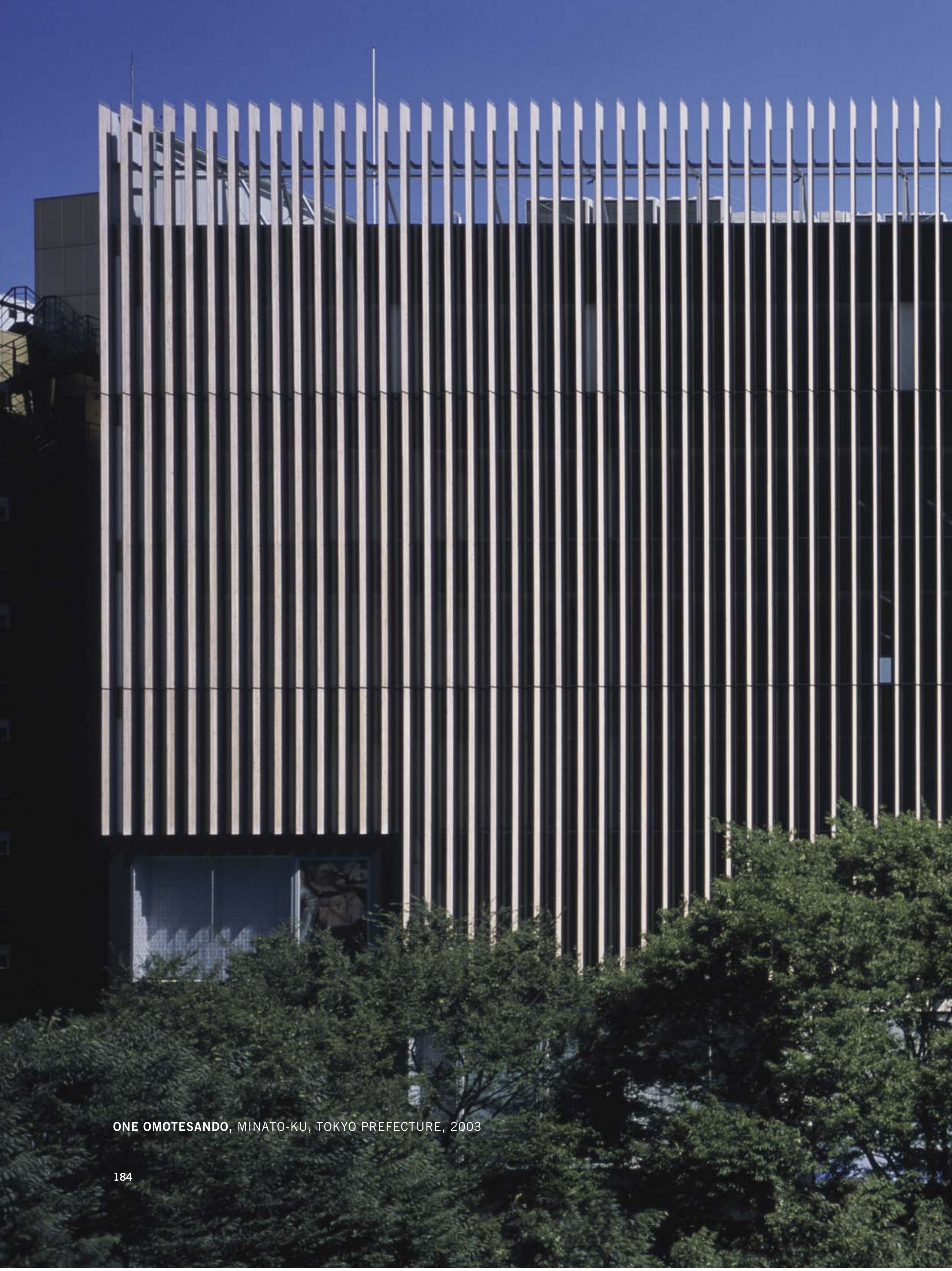
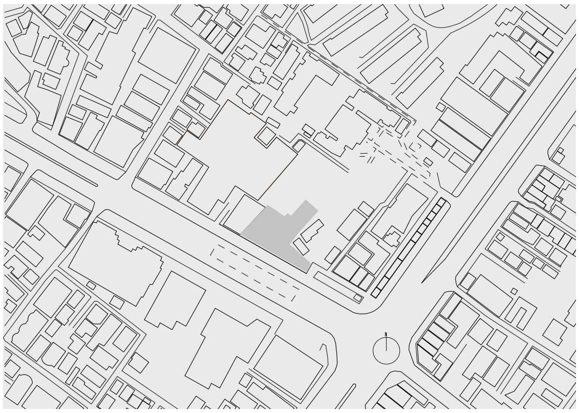
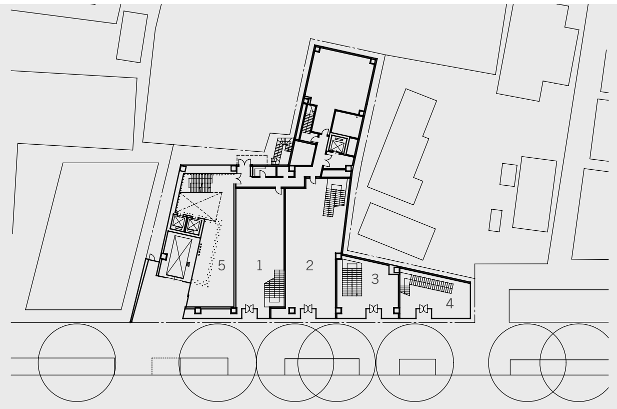
OPPOSITE / DETAIL OF NORTH FACADE WITH ENTRANCE TO THE STATION
TOP / VIEW OF NORTH FACADE
BOTTOM / VIEW OF SOUTH FACADE

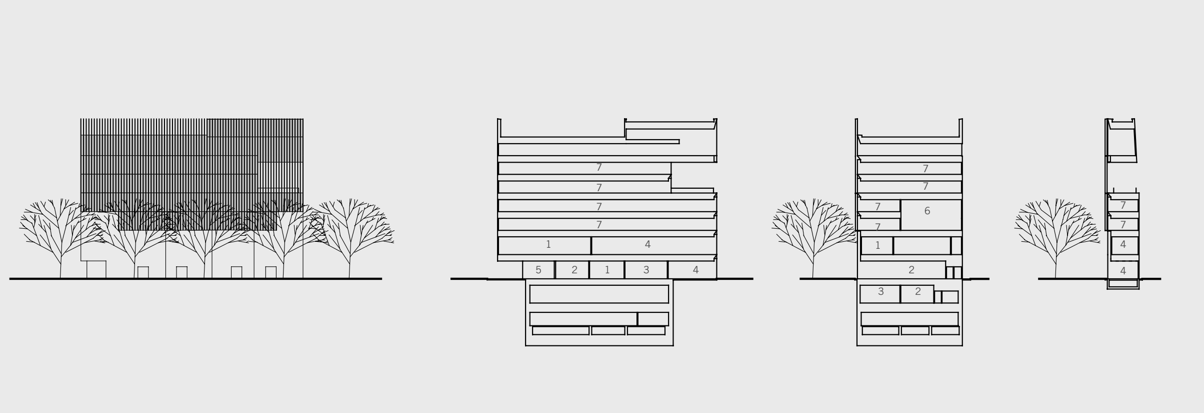


ONE OMOTESANDO, MINATO-KU, TOKYO PREFECTURE, 2003

LOEWE







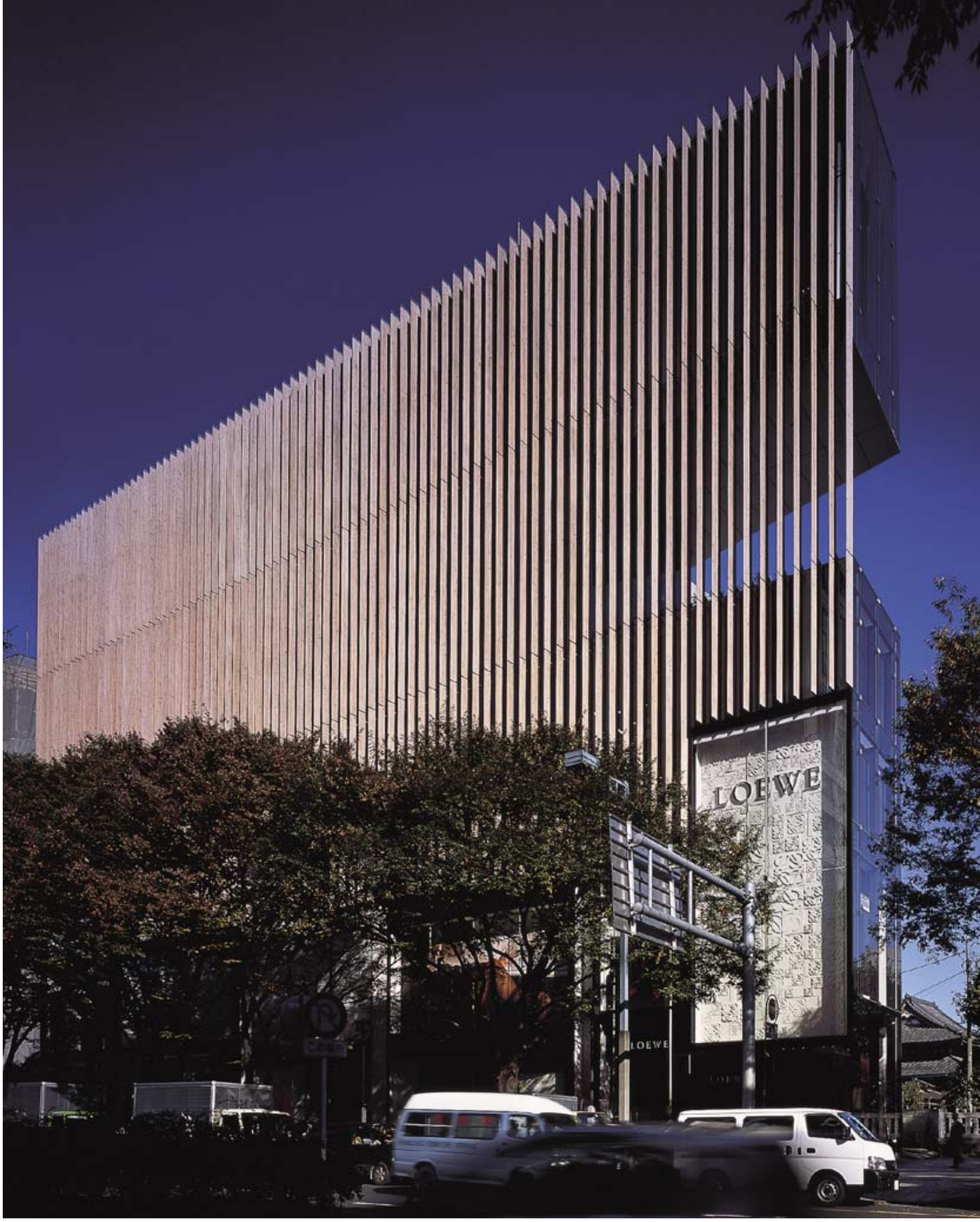
1 / RETAIL A
2 / RETAIL B
3 / RETAIL C
4 / RETAIL D
5 / ENTRANCE HALL
6 / RECEPTION HALL
7 / OFFICE

This multistory structure, located at the beginning of Omotesando—often called the most beautiful avenue in Tokyo—is the main office building of the French fashion group Louis Vuitton Moët Hennessy. A picturesque boulevard lined on both sides with huge zelkova trees, Omotesando leads to Meiji Shrine, the largest Shinto shrine in Tokyo. With his design Kuma intended to echo the trees that line the avenue in the building. In conjunction with a curtain wall, he created a system of 17.7-inch-deep (45 cm) mullions made of laminated larch wood, echoing the trees in the material as well as in the vertical lines of the mullions.

The wooden elements are also a reference to the wooden architecture of Meiji Shrine, while the deep mullions contribute to energy conservation by shielding the interior from direct sunlight. As Japan's Building Standard Law prohibits the use of wood on the exterior walls of buildings in large urban areas, Kuma proposed installing a drencher on the outside wall and obtained special permission.

The building, following the contours of the narrow site, has an irregular plan that is reflected in the form of its volume. Part of its wedge-shaped south side is cantilevered, creating an interesting composition. Inside, the building is designed to serve the functions of a large office complex.

Before World War II, Tokyo was a city of wooden architecture, and the human scale of its buildings and the warmth and softness of the natural material made it uniquely appealing. Since the late 1940s, however, Tokyo has been inundated with huge concrete buildings that have destroyed its charm as a city. Successfully using wood in this building is one of Kuma's initial steps toward restoring Tokyo's attractiveness, and to reconstruct a more humane city.



OPPOSITE TOP LEFT
SITE PLAN

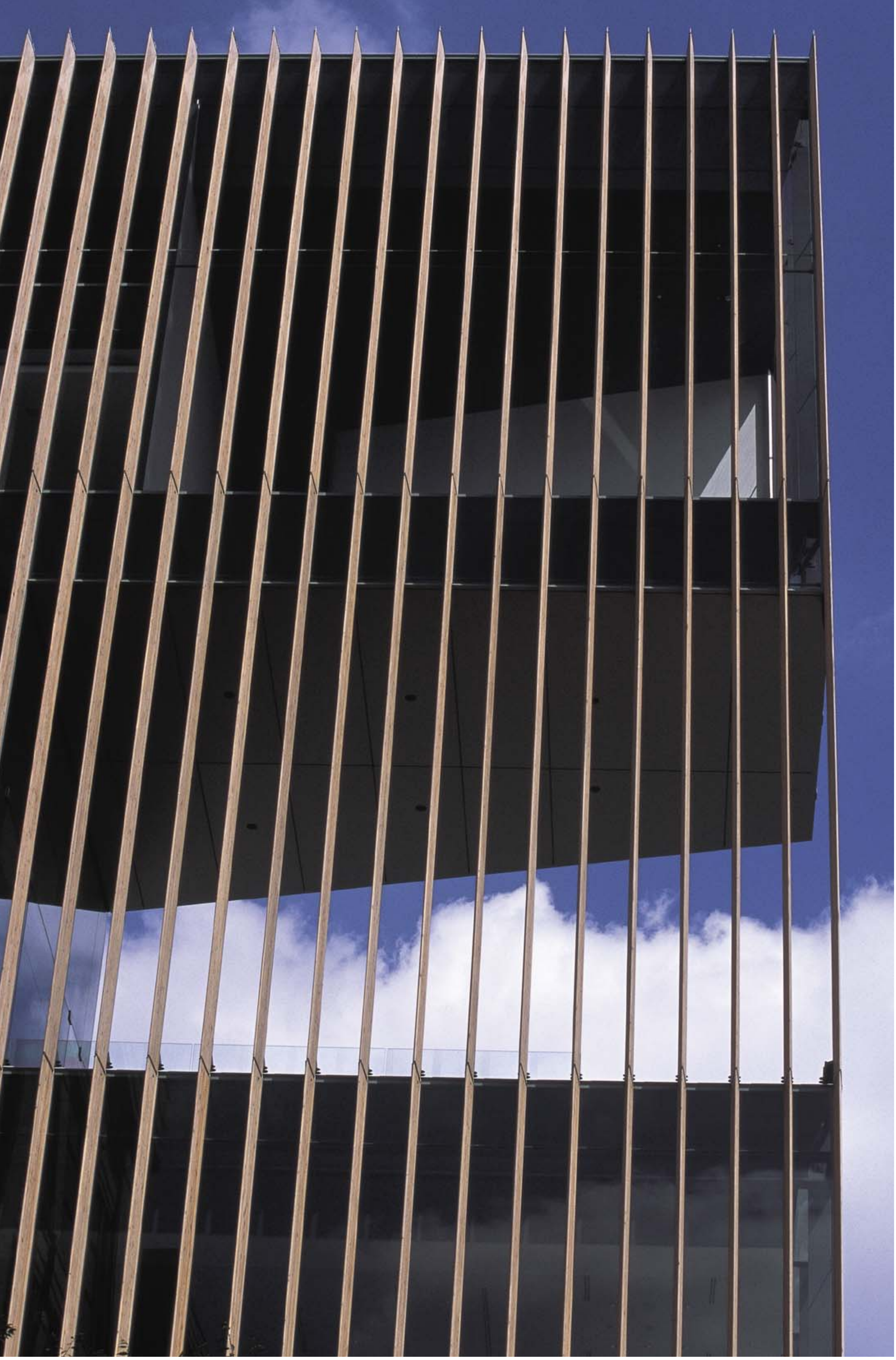
OPPOSITE TOP RIGHT
FIRST-FLOOR PLAN

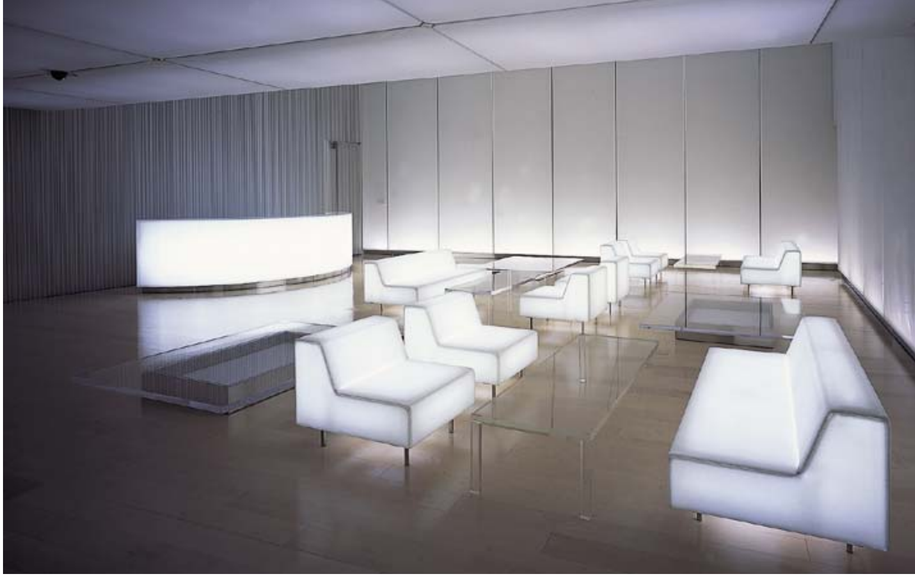
OPPOSITE BOTTOM LEFT
ELEVATION

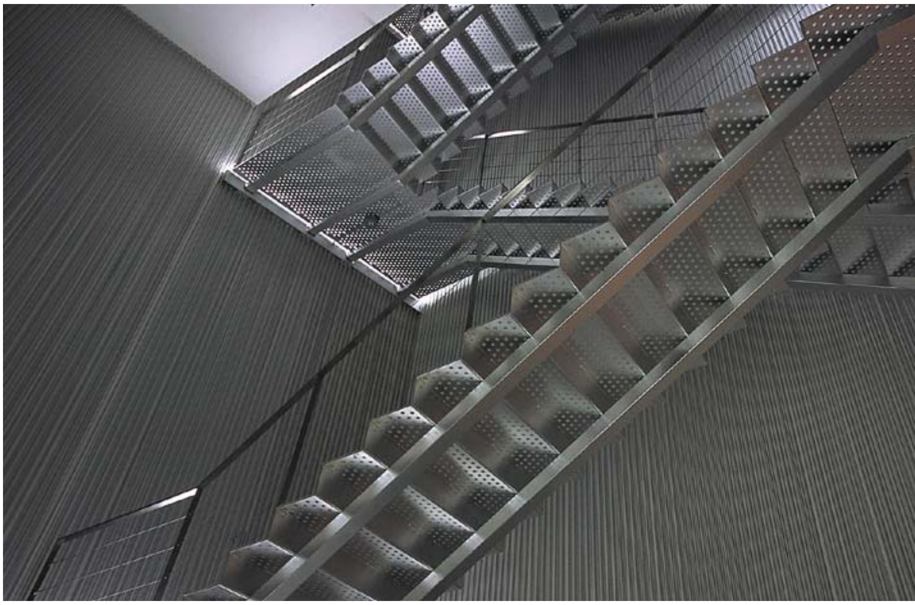
OPPOSITE BOTTOM RIGHT
SECTIONS

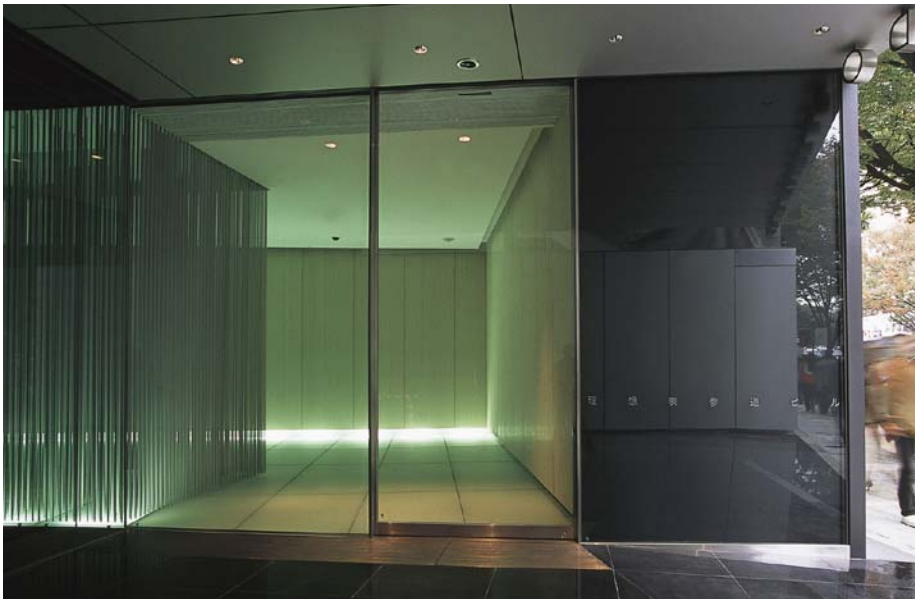
TOP
VIEW FROM STREET

BOTTOM
DETAIL OF VERTICAL LOUVERS

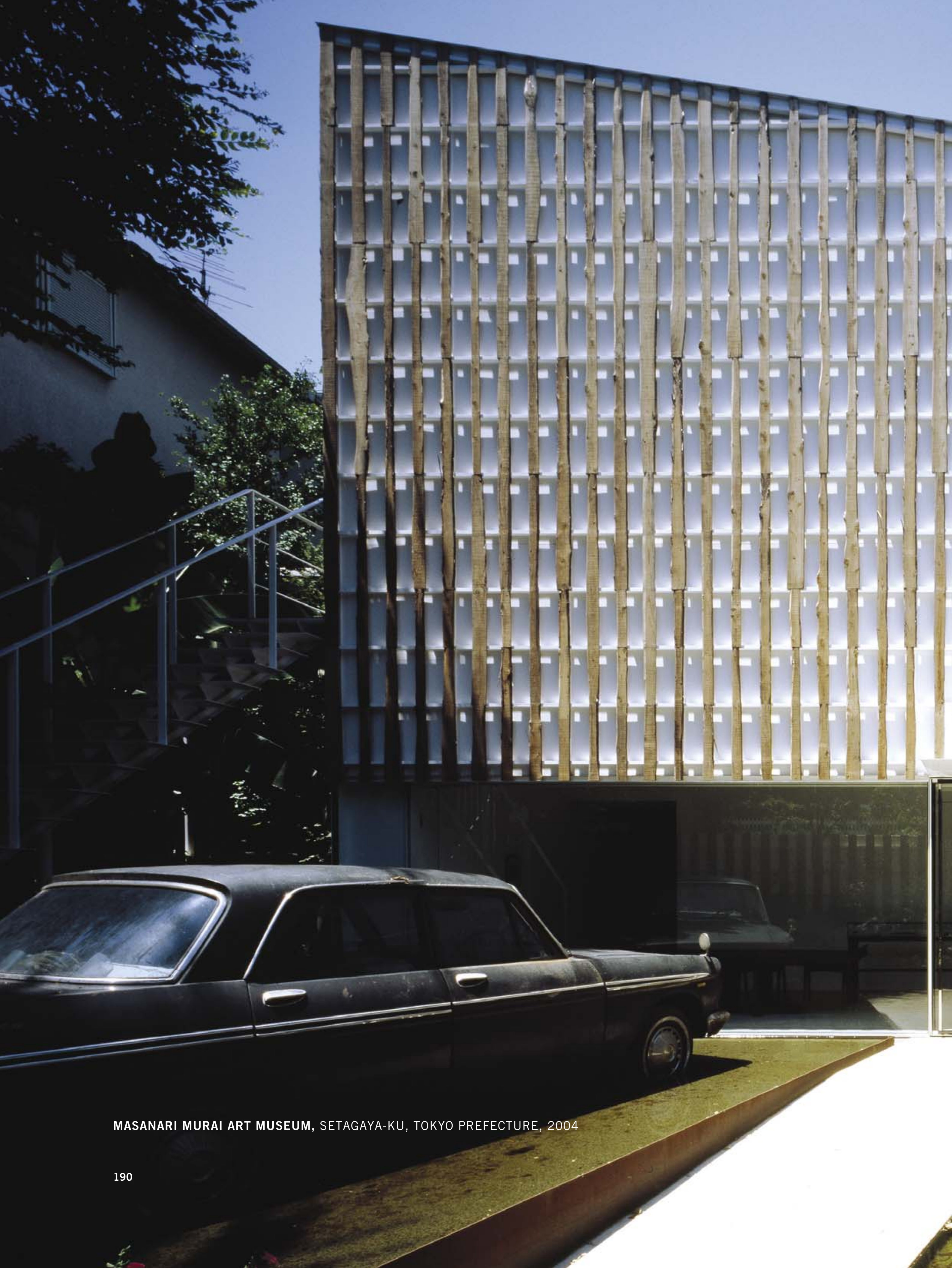




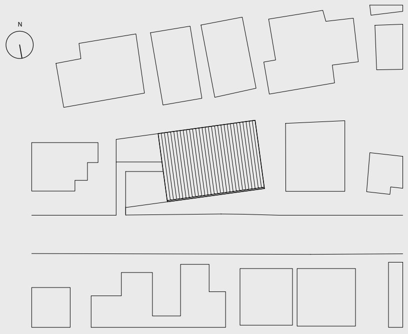


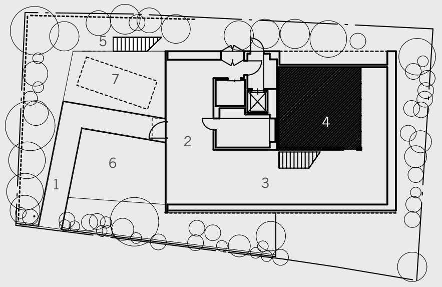


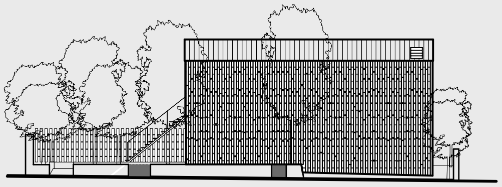
OPPOSITE / DETAIL OF STREET FACADE
TOP / RECEPTION AREA WITH ILLUMINATED FURNITURE
MIDDLE / STAIRWAY DETAIL
BOTTOM / VIEW OF ENTRANCE



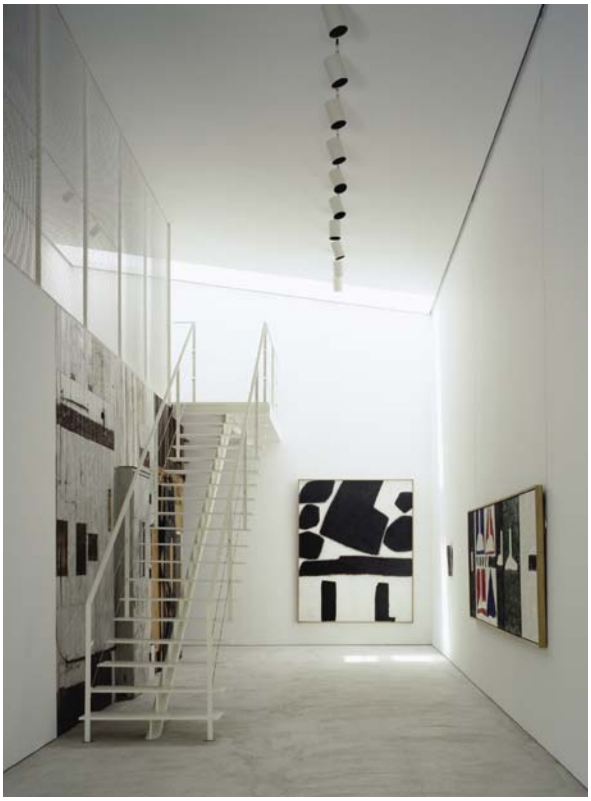
MASANARI MURAI ART MUSEUM, SETAGAYA-KU, TOKYO PREFECTURE, 2004







1 / APPROACH
2 / LOBBY
3 / FIRST-FLOOR GALLERY
4 / MURAI'S OLD ATELIER
5 / STAIRWAY TO THE UPPER LEVEL
6 / REFLECTING POOL
7 / OLD AUTOMOBILE

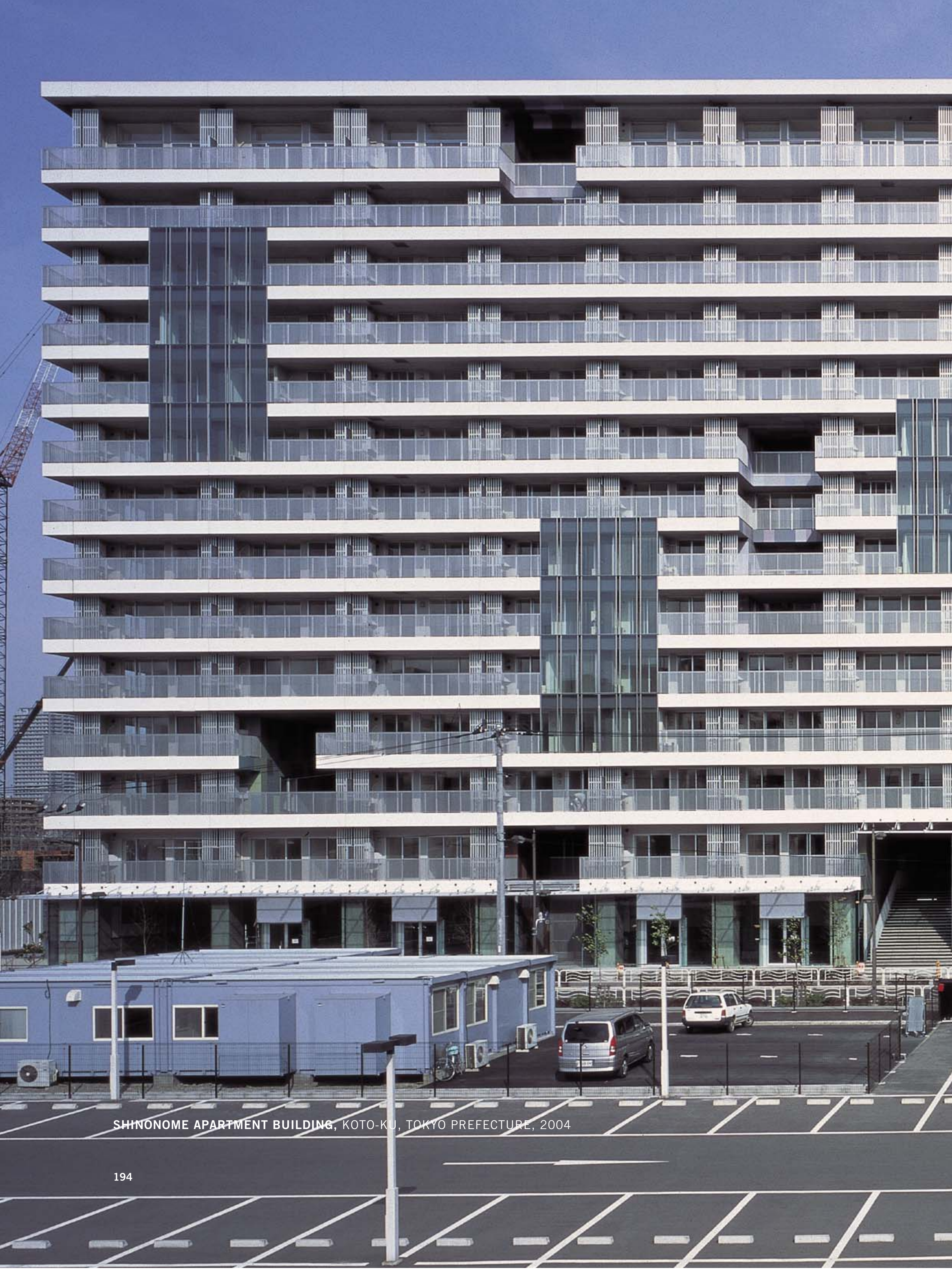


ABOVE / GALLERY
TOP LEFT / SITE PLAN
MIDDLE LEFT / FIRST-FLOOR PLAN
BOTTOM LEFT / NORTH ELEVATION
OPPOSITE TOP / VIEW THROUGH MESH SCREEN ON UPPER GALLERY
OPPOSITE BOTTOM / DETAIL OF UPPER GALLERY

Located in a quiet residential area in the west suburbs of Tokyo, this museum dedicated to the late Masanari Murai (1905–1999), a well-known pioneer of modernist painting in Japan, looks very much like one of the houses in the vicinity. The small project was built on the site of the late painter's private residence, and parts of the old house, built in the 1940s, were retained in the design. Murai's old atelier was preserved by Kuma in its original state and enveloped with a new enclosure, resulting in an arrangement that can be compared to the Japanese lacquered lunch box, where one box is contained within another.

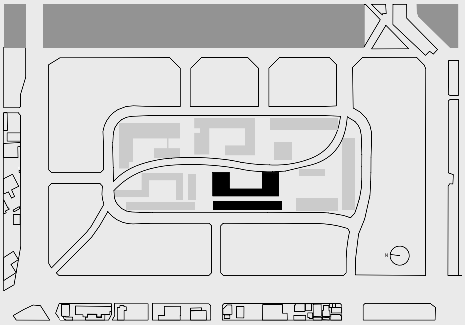
The area between the two buildings, or boxes, functions as the gallery where Murai's works are exhibited. The atelier itself thus becomes one of the objects that are displayed inside the large box; conversely, seen from the atelier, the new enclosure looks like a wooden fence. The resulting area between the two buildings is both a discontinuity in physical space and a discontinuity in time—it acts as a threshold between "the old time" and "the new time." The restrained, minimalist design of the gallery highlights Murai's paintings, which are also minimalist in style. On the second floor, part of the space surrounding the old atelier serves as the small residence for Murai's widow. The museum and the residence have separate entrances but are connected by means of a stairway that leads to the upper-level gallery within the large, two-story space.

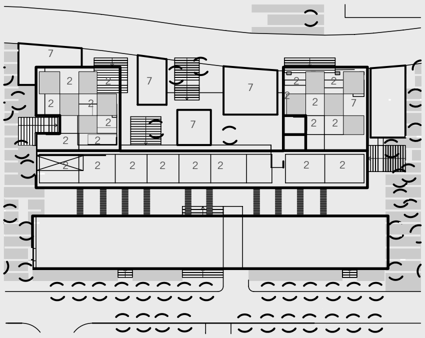
On the lover level, the glass wall of the gallery opens the view to a shallow pool of water at the entrance of the museum, reflecting the interior spaces. Adding to the experience, Kuma placed Murai's old timeworn automobile in the pool, emphasizing again a connection between the past and the present. Moreover, the new building is covered by thin wooden boards that Kuma rescued from the old residence. They are affixed to the exterior walls like vertically arranged louvers, with wide gaps in between. This unusual design gives the entire building a vibrant and highly unique, almost virtual appearance.

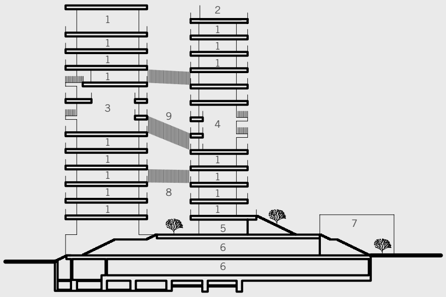


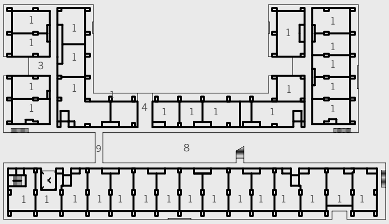
SHINONOME APARTMENT BUILDING, KOTO-KU, TOKYO PREFECTURE, 2004

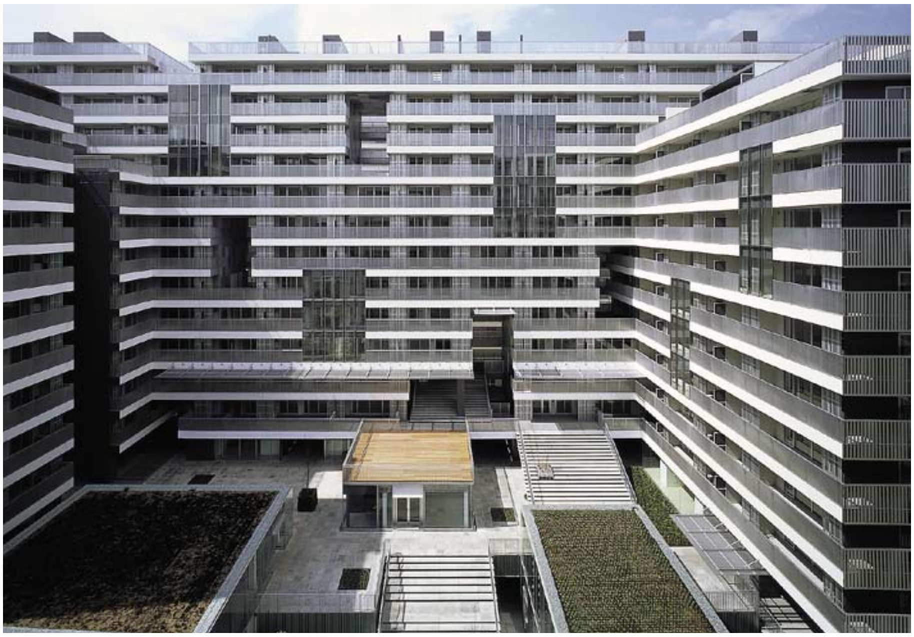
止マレ









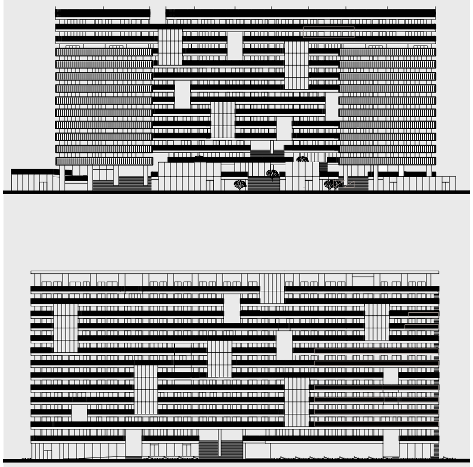


1 / RESIDENCE
2 / ROOF GARDEN
3 / COMMON TERRACE
4 / PRIVATE TERRACE
5 / SMALL OFFICE
6 / PARKING
7 / SHOP
8 / COMMUNITY ATRIUM
9 / COMMUNITY BRIDGE

The Shinonome Apartment Building, located on reclaimed land near Tokyo Bay, represents a new concept in public housing in Japan. Combining dwellings, offices (SOHOs—Small Offices and Home Offices), as well as commercial and public facilities, the fifteen-story structure is part of a larger development in the area that aims at rebuilding the waterfront of Tokyo. The projects in this development are to provide new possibilities for up-to-date modes of urban living, with other units in the well-organized compound designed by Toyo Ito, Riken Yamamoto, and others.

Multifamily housing in the twentieth century tended to accommodate space for dwellings only, excluding other functions such as stores, offices, or communal areas. This solution has been particularly dominant in Japanese public housing, resulting in a lower quality of life for residents. Kuma's multi-family housing project mixes dwellings, offices, and facilites to the greatest extent possible, restoring a well-rounded quality and functionality to urban lifestyles.

A communication atrium is located in the center of the structure, surrounded by 648-square-foot



OPPOSITE TOP LEFT
SITE PLAN

OPPOSITE TOP RIGHT
ROOF PLAN

OPPOSITE MIDDLE LEFT
CROSS SECTION

OPPOSITE MIDDLE RIGHT
TYPICAL FLOOR PLAN

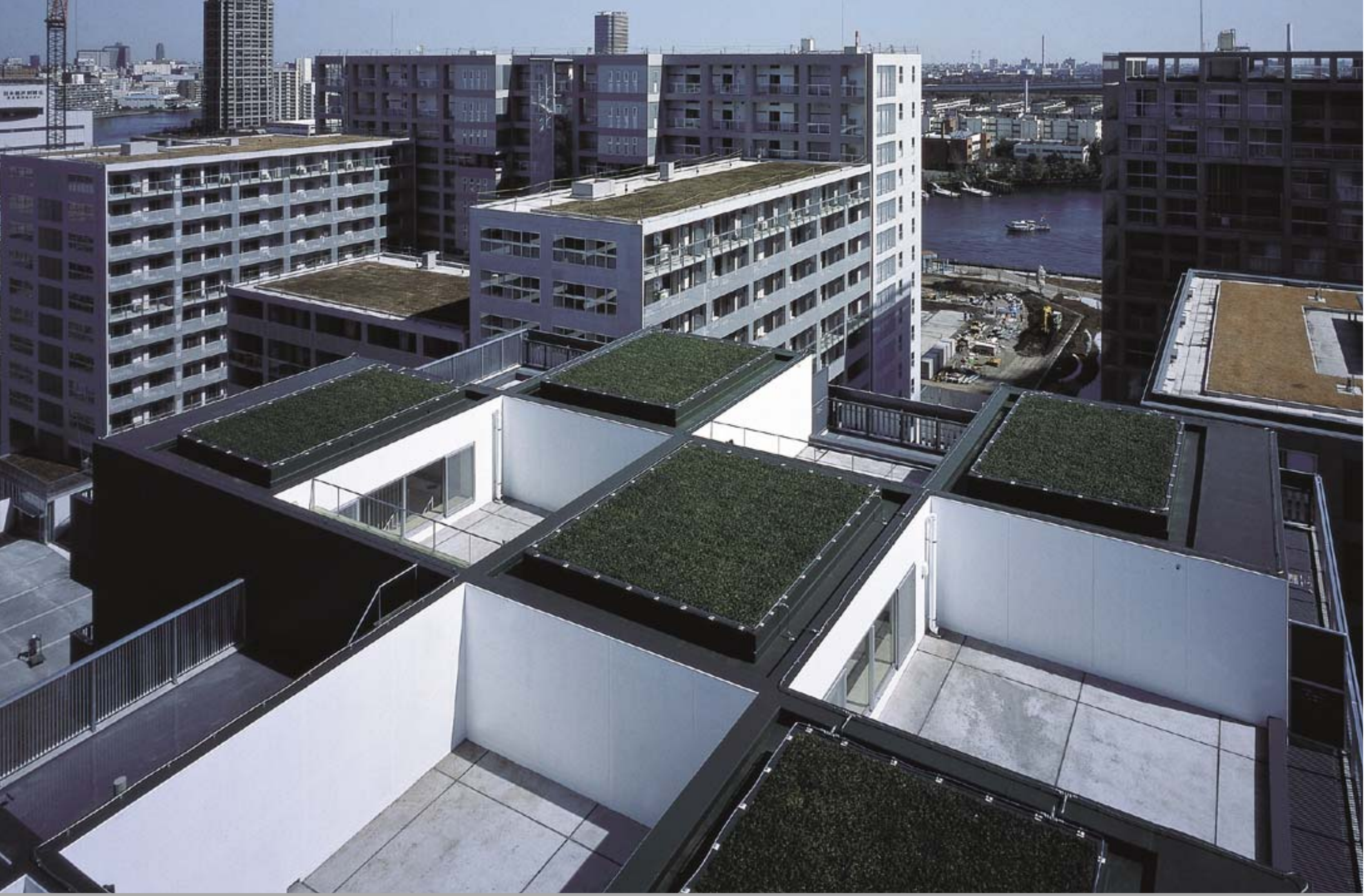
OPPOSITE BOTTOM
EXTERIOR VIEW WITH COURTYARD

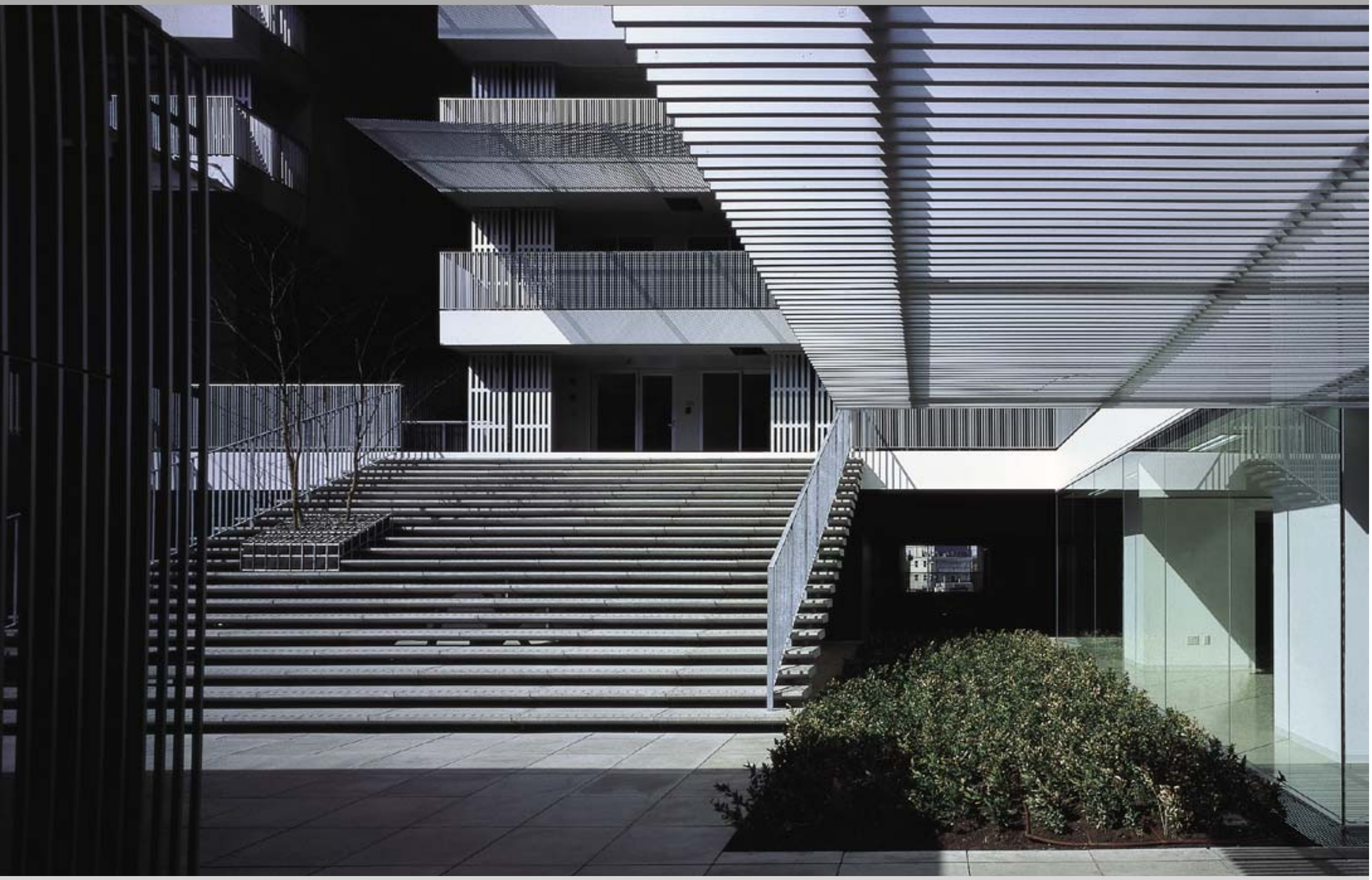
LEFT
ENTRANCE DETAIL

TOP
EAST AND WEST ELEVATIONS

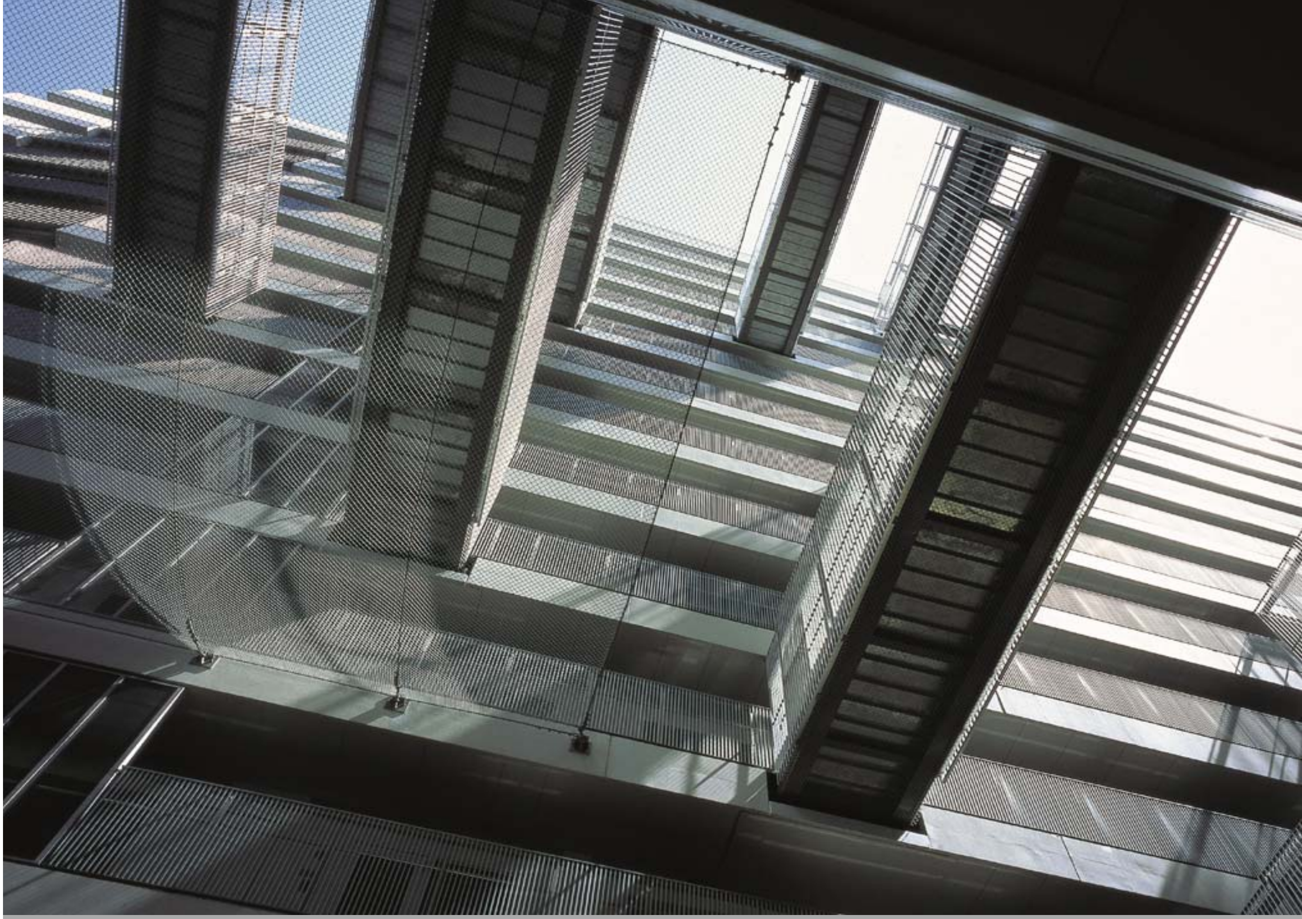
(60-square-meter) basic residential units and 270-square-foot (twenty-five-square-meter) annex units, which can be used as a bedroom, study, SOHO, store, or for a number of other purposes. The idea of combining various activities and unit sizes in one structure is based on the concept of a three-dimensional "street." This concept is a further development of the model originally proposed by Le Corbusier in his 1952 Unité d'Habitation project in Marseilles, France, which placed strong emphasis on creating a three-dimensional structure from the random chaos of the street.

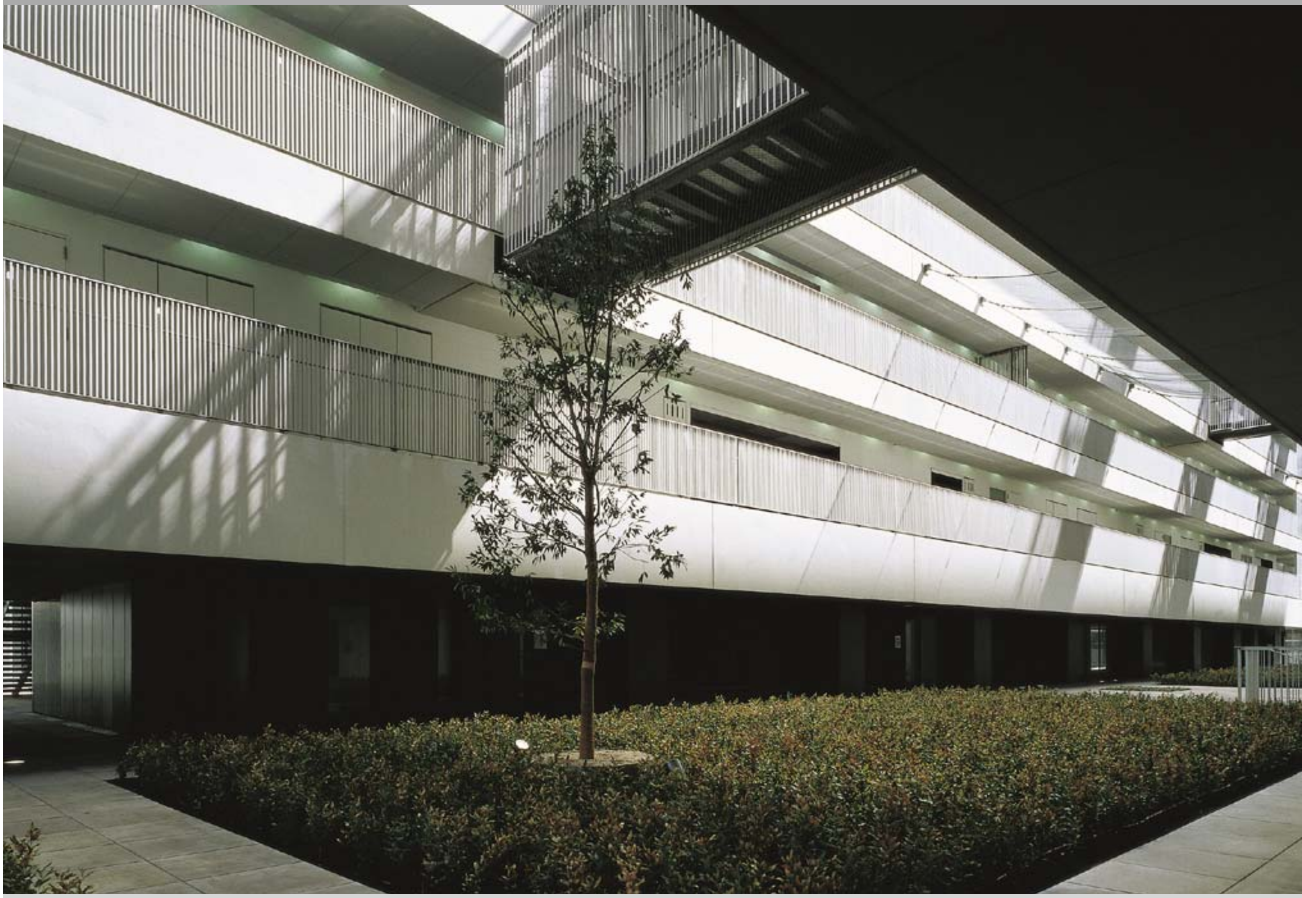
In Kuma's project, individual families can utilize multiple units on both sides of the communication atrium, facilitating the concept of what could be called "networked housing." The building thus provides an alternative to conventional twentieth-century housing for extended families, who can now live in the same structure without actually sharing a house or apartment. The entire roof space is used as a flower or vegetable garden for the inhabitants, adding a productive element to the purely recreational roof terrace of Le Corbusier's project.





TOP / DETAIL OF TOP FLOOR WITH INNER COURTS AND ROOFTOPS
BOTTOM / STAIRWAY TO ENTRANCE





TOP / UPWARD VIEW OF INNER COURTYARD WITH CONNECTING BRIDGES
BOTTOM / DETAIL OF PLANTED FLOOR OF COURTYARD

PROJECT CREDITS

KIRO-SAN OBSERVATORY (1994)
Yoshiumi, Ochi-gun, Ehime Prefecture
Building area: 5,098 square feet (474 m^2) (horizontal projection)
Architects: Kengo Kuma & Associates
Structural engineers: Aki Structural Planning
Mechanical engineers: Environment Equipment Consultant
General contractors: Futagami Gumi

WATER/GLASS (1995)
Atami, Shizuoka Prefecture
Building area: 6,121 square feet, (569 m^2), floor area: 12,107 square feet (1125 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: K. Nakata & Associates
Mechanical engineers: Kawaguchi Engineering Consultant
General contractors: Takenaka Cooperation

RIVER/FILTER (1996)
Tamakawa, Fukushima Prefecture
Building area: 8,273 square feet (7693 m^2), floor area: 9,956 square feet (925 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Aoki Structural Engineers
General contractors: Ando Architecture Design Office

NOH STAGE IN THE FOREST (1996)
Toyoma, Tome-gun, Miyagi Prefecture
Building area: 5,779 square feet (537 m^2), floor area: 5,361 square feet (498 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Aoki Structural Engineers
Mechanical engineers: Kawaguchi Engineering Consultant
General contractors: JV of Sakuta Construction and Oikawa Komuten

MEMORIAL PARK (1997)
Takasaki, Gumma Prefecture
Building area: 2,020 square feet (188 m^2), floor area: 2,020 square feet (188 m^2)
Architects: Kengo Kuma & Associates
Structural and mechanical engineers: Inoue Kogyo

KITAKAMI CANAL MUSEUM (1999)
Ishinomaki, Miyagi Prefecture
Building area: 5,632 square feet (523 m^2), floor area: 6,597 square feet (613 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Aoki Structural Engineers
Mechanical engineers: Kawaguchi Engineering Consultant, Yamazaki Electrical Construction Planning
General contractors: Hishinaka Construction

STONE MUSEUM (2000)
Nasu, Nasu-gun, Tochigi Prefecture
Building area: 5,734 square feet (533 m^2), floor area: 5,677 square feet (528 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: K. Nakata & Associates
Mechanical engineers M. I. Consultant
General contractors: Ishihara Construction, ECRIS

MUSEUM OF ANDO HIROSHIGE (2000)
Bato, Nasu-gun, Tochigi Prefecture
Building area: 23,550 square feet (2189 m^2), floor area: 21,116 square feet (1962 m^2)
Architects: Kengo Kuma & Associates
Cooperative architects: Ando Architecture Design Office
Structural engineers: Aoki Structural Engineers
Mechanical engineers: P. T. Morimura & Associates
General contractors: Obayashi Corporation

TAKAYANAGI COMMUNITY CENTER (2000)
Takayanagi, Niigata Prefecture
Building area: 933 square feet (87 m^2), floor area: 946 square feet (88 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: K. Nataka & Associates
Mechanical engineers: P. T. Morimura & Associates
General contractors: Nagai Corporation
Co-constructor: Hutoshi Kurihara, Hiromi Takahashi, Yasuo Kobayashi

NASU HISTORY MUSEUM (2000)
Nasu, Nasu-gun, Tochigi Prefecture
Building area: 6,231 square feet (579 m^2), floor area: 4,930 square feet (458 m^2)
Architects: Kengo Kuma & Associates
Cooperative architects: Ando Architecture Design Office
Structural engineers: K. Nakata & Associates
Mechanical engineers: P. T. Morimura & Associates
General contractors: Kawada Industries, Inc.

TAKASAKI PARKING BUILDING (2001)
Takasaki, Gumma Prefecture
Building area: 47,900 square feet (4,452 m^2), floor area: 319,790 square feet (29,702 m^2)
Architects: Kengo Kuma & Associates, Research Institute of Architecture
Structural engineers: R.I.A. (Research Institute of Architecture)
Mechanical engineers: P. T. Morimura & Associates
General contractors: JV of Inoue, Fuyuki, and Nobusawa Industry

SEA/FILTER (2001)
Onoda, Yamaguchi Prefecture
Building area: 5,613 square feet (522 m^2), floor area: 4,934 square feet (459 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Aoki Structural Engineers
Mechanical engineers: P. T. Morimura & Associates
General contractors: JV of FUJI Industry Co., Ltd. and Sato Kogyo Co., Ltd.

GINZAN ONSEN HOT SPRING BATH HOUSE (2001)
Obanazawa, Yamagata Prefecture
Building area: 403 square feet (37 m^2),

floor area: 680 square feet (63 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Aoki Structural Engineers
Mechanical engineers: Yahagi Mechanical Engineering, Ohba Electric Engineering
General contractors: Honmakensetsu Co.

PLASTIC HOUSE (2002)
Meguro-ku, Tokyo Prefecture
Building area: 897 square feet (83 m^2),
floor area: 1,859 square feet (173 m^2)
Architects: Kengo Kuma & Associates
Structural and mechanical engineers: Kajima Design

GREAT (BAMBOO) WALL (2002)
Beijing, China
Building area: 7741 square feet (719 m^2),
floor area: 5686 square feet (528 m^2)
Architects: Kengo Kuma & Associates
Collaborators: ARUP China, Rocco Landscape Design
Structural engineers: K. Nakata & Associates
Mechanical engineers: Beijing Third Dwelling, Architectural Engineering Company

BAISO-IN TEMPLE (2003)
Minato-ku, Tokyo Prefecture
Building area: 37,575 square feet (3,492 m^2),
floor area: 319,016 square feet (29,648 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Oak Structural Design Office
Mechanical engineers: Hase Corporation
General contractors: Hase Corporation, Kajima Corporation

PAINT HOUSE BUILDING (2003)
Tama, Tokyo Prefecture
Building area: 60,010 square feet (5577 m^2),
floor area: 409,074 square feet (38018 m^2)
Architects: Kengo Kuma & Associates
Structural and mechanical engineers: Kajima Design
General Contractors: Kajima Corporation

FOREST/FLOOR (2003)
Karuizawa, Nagano Prefecture
Building area: 1,488 square feet (138 m^2),
floor area: 1,333 square feet (124 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Makino Structural Design
Mechanical engineers: P. T. Morimura & Associates

SOBA RESTAURANT AT TOGAKUSHI SHRINE (2003)
Togakushi, Nagano Prefecture
Building area: 2,509 square feet (233 m^2),
floor area: 2,552 square feet (237 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Oak Structural Design Office
General contractors: Chihiro-Kensetsu Corporation

HORAI ONSEN BATH HOUSE (2003)
Atami, Shizuoka Prefecture
Building area: 594 square feet (55 m^2),
floor area: 597 square feet (55 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Aoki Structural Engineers
Mechanical engineers: Water Works Watanabe
Contractors (timber construction): Yamori Contractors
Contractors (concrete construction): Fukui Contractors

SHIBUYA STATION, facade renovation (2003)
Shibuya-ku, Tokyo Prefecture
Facade area: north entrance 654 square feet (61 m^2), south entrance 522 square feet (48 m^2)
Architects: Kengo Kuma & Associates, JR East Japan, Railway Company, JR East Design Company
Structural and mechanical engineers: JR East Japan, Railway Company, JR East Design Company
General contractors: Totetsu Kogyo Co., Ltd.

ONE OMOTESANDO (2003)
Minato-ku, Tokyo Prefecture
Building area: 10,837 square feet (1007 m^2),
floor area: 82,745 square feet (7690 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: Oak Structural Design Office
Mechanical engineers: P. T. Morimura & Associates
General contractors: Ando Corporation

MASANARI MURAI ART MUSEUM (2004)
Setagaya-ku, Tokyo Prefecture
Building area: 1,761 square feet (164 m^2),
floor area: 2,883 square feet (268 m^2)
Architects: Kengo Kuma & Associates
Structural engineers: K. Nakata & Associates
General contractors: Matsushita Industry Co., Ltd.

SHINONOME APARTMENT BUILDING (2004)
Koto-ku, Tokyo Prefecture
Building area: 56,141 square feet (5218 m^2),
floor area: 440,724 square feet (40959 m^2)
Architects: Kengo Kuma & Associates, Research Institute of Architecture, Urban Development Corporation, JV of Maeda, Hazama, and Haseko
Structural engineers: Takumi Orimoto Strucural Engineers & Associates, Urban Development Corporation, JV of Maeda, Hazama, and Haseko
Mechanical engineers: Sogo Consultants, Environmental Equipment, Urban Development Corporation, JV of Maeda, Hazama, and Haseko
General contractors: JV of Maeda, Hazama, and Haseko

BIOGRAPHY

1954	Born in Kanagawa Prefecture, Japan
1979	Master Course, Department of Architecture, University of Tokyo
1985–86	Visiting Scholar, Graduate School, Columbia University and Asian Cultural Council
1987	Established Spatial Design Studio
1990	Established Kengo Kuma & Associates
1998–99	Professor at Faculty of Environmental Information, Keio University
2001–	Professor at Faculty of Science and Technology, Keio University

AWARDS

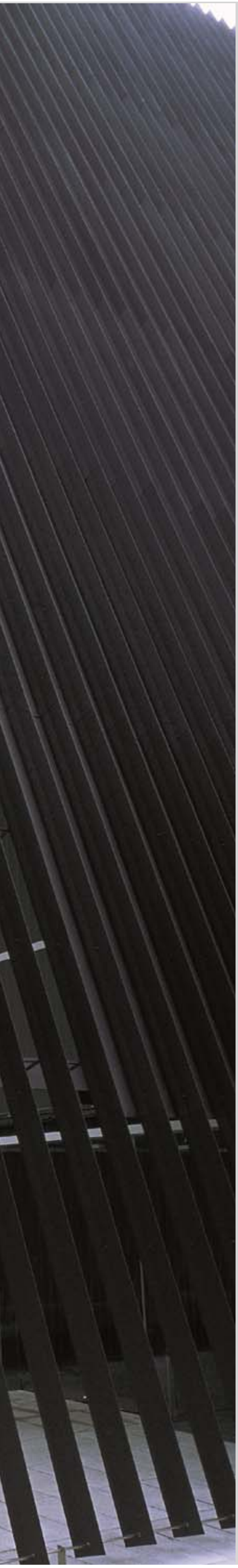
1994	Good Design Architecture Award, Japanese Ministry of International Trade and Industry
1995	Grand Prize, JCD Design Award 1995, Cultural/Public Institutions
1996	Architectural Institute of Japan Award
	First Place, AIA DuPONT Benedictus Award
	Grand Prize, Regional Design Award
1999	Honorable Mention, Boston Society of Architecture
	Unbuilt Architecture Design Award 2000
2000	Grand Prize, Prize of AIJ, Tohoku Chapter for Design
	Director General of Forestry Agency Prize
	Togo Murano Award and Architectural Institute Award
2001	Grand International Stone Architecture Award, Italy
2002	Spirit of Nature Wood Architecture Award, Finland

EXHIBITIONS

1992	Tokyo Columns M2, Setagaya-ku, Tokyo
1993	City of Labyrinth, Sezon Museum of Art, Toshima-ku, Tokyo
	Tsukashin Hall, Amagasaki, Hyogo Prefecture
1995	Velocity of Transmission, Gallery MA, Minato-ku, Tokyo (solo exhibition)
	Venice Biennale 1995, Venice, Italy
1996	Milano Triennale, Milano, Italy
1997	Virtual Architecture, Museum of the University of Tokyo, Bunkyo, Tokyo
2000	Venice Biennale 2000, Venice, Italy
	ARCHILAB 2000, Orléans, France
2001	RIBA, Japanese Architecture, London, Great Britain
2002	ARCHILAB 2002, Orléans, France

COMPETITIONS

1993	Second Prize, Niigata City Performing Arts Center Competition
	Second Prize, Abashiri Urban Planning Competition, Hokkaido
1996	Honorable Mention, Kansai-kan of the National Diet Library Competition, Kyoto
	Third Prize, Nagaoka Culture Forum Design Competition, Niigata Prefecture
2003	Honorable Mention, San Jose University, School of Art Museum, San Jose, California, USA
2002	First Prize, Tokyo University of Agriculture, Nodai Museum Competition, Tokyo
2004	First Prize, Lifelong Learning Institution in Ondo-cho, Ondo-cho, Hiroshima Prefecture



LIST OF WORKS (Names in bold are featured in this book)

1988 Kyodo Grating, Setagaya-ku, Tokyo Prefecture
Small Bath House in Izu, Kamo-gun, Shizuoka Prefecture (with S. Shinohara)

1989 GT-M, Maebashi, Gumma Prefecture

1991 Rustic, Shinjuku-ku, Tokyo Prefecture
Doric, Minato-ku, Tokyo Prefecture
M2 Building, Setagaya-ku, Tokyo Prefecture

1992 Kinojo Golf Club, Soja, Okayama Prefecture
Japan (JR) Museum, Minato-ku, Tokyo Prefecture (project)

1994 Man-ju, Sawara-ku, Fukuoka Prefecture
Yusuhara Visitors' Center, Yusuhara, Takaoka-gun, Kochi Prefecture
Kiro-san Observatory, Yoshiumi, Ochi-gun, Ehime Prefecture

1995 **Water/Glass, Atami, Shizuoka Prefecture**
Space Design of the Venice Biennale Japanese Pavilion, Venice, Italy

1996 Glass/Shadow Golf Club, Tomioka, Miyagi Prefecture
Noh Stage in the Forest, Tome-gun, Miyagi Prefecture
River/Filter, Tamakawa, Fukushima Prefecture
Moving Garden Civic Hall, Nagaoka, Niigata Prefecture (project)
Nagaoka Culture Forum, Nagaoka, Niigata Prefecture (project)
Kansai-kan National Diet Library, Kyoto Prefecture (project)
Grass Net, Milano Triennale, Italy (project)

1997 Eco Particle, Miyako-jima, Okinawa Prefecture (project)
Simple Garden Hotel, Le Landes, France (project)
Reverse Theater, Chofu, Tokyo Prefecture (project)
Grass/Glass Tower, Tokyo Prefecture (project)
Yonezawa Public University Project, Yonezawa, Yamagata Prefecture (project)
Ocean/City, Heng Qin Island, China (project)
Memorial Park, Takasaki, Gumma Prefecture (project)

1998 Awaji Service Area, Awaji, Tsuna-gun, Hyogo Prefecture
Water/Slats, Oiso, Kanagawa Prefecture (project)
EXPO 2005, Basic Conception, Seto, Aichi Prefecture (project)
Seaside Subcenter of Tokyo, Minato-ku, Tokyo Prefecture (project)

1999 Wood/Slats Guest House, Hayama, Miura-gun, Kanagawa Prefecture
Kitakami Canal Museum, Ishinomaki, Miyagi Prefecture
Super Street, Kobe, Hyogo Prefecture (project)
Bamboo House, Kanagawa Prefecture

2000 **Museum of Ando Hiroshige, Bato, Nasu-gun, Tochigi Prefecture**
Takayanagi Community Center, Takayanagi, Niigata Prefecture
Sakushin Gakuin University, Utsunomiya, Tochigi Prefecture
Stone Museum, Nasu, Nasu-gun, Tochigi Prefecture

Bamboo House 2—Kurakuen Project, Nishinomiya, Hyogo Prefecture (project)
Institute of Disaster Prevention, Fujishiro, Kitasoma-gum, Ibaraki Prefecture (project)
Nasu History Museum, Nasu, Nasu-gun, Tochigi Prefecture

2001 **Sea/Filter, Onoda, Yamaguchi Prefecture**
Ginzan Onsen Hot Spring Bath House, Obanazawa, Yamagata Prefecture
Takasaki Parking Building, Takasaki, Gumma Prefecture
The Skin that Filters the River, Minato-ku, Tokyo (project)
Nikko Police Box, Nikko, Tochigi Prefecture

2002 **Plastic House, Meguro-ku, Tokyo Prefecture**
Great (Bamboo) Wall, Beijing, China
Shochiku Building, Chuo-ku, Tokyo Prefecture
Adobe Museum for Wooden Buddha, Yamaguchi Prefecture

2003 **Baiso-in Temple, Minato-ku, Tokyo Prefecture**
Forest/Floor, Karuizawa, Nagano Prefecture
Soba Restaurant at Togakushi Shrine, Togakushi, Nagano Prefecture
Horai Onsen Bath House, Atami, Shizuoka Prefecture
Shibuya Station, facade renovation, Shibuya-ku, Tokyo Prefecture
Great (Bamboo) Wall—Phase 2, China
Paint House Building, Tama, Tokyo Prefecture
One Omotesando, Minato-ku, Tokyo Prefecture

2004 **Masanari Murai Art Museum, Setagaya-ku, Tokyo Prefecture**
Vertical Garden, Fukusaki, Osaka Prefecture
Food and Agriculture Museum, Tokyo University of Agriculture, The Research Institute of Evolutionary Biology, Setagaya-ku, Tokyo Prefecture
Waketokuyama Restaurant, Minato-ku, Tokyo Prefecture
Shinonome Apartment Building, Koto-ku, Tokyo Prefecture
Museum, Nagasaki, Nagasaki Prefecture
Shizuoka Expo Gate Building, Hamamatsu, Shizuoka Prefecture
Suntory Headquarters, Tokyo, Tokyo Prefecture (project)
Lotus House, Atami, Shizuoka Prefecture (project)

SELECTED BIBLIOGRAPHY

Kengo Kuma. *10 Houses*. Tokyo: Toso Publishing, 1986. (in Japanese)
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